Martinez R., C.

1969 - 70

189 - # 367

New Guinea
(calif.)

C. Martinez
1969 - 1971

Wantoat, 4000 ft, Saruwaged Range, Morobe District, New Guinea
Aug 28 - 1969

Skinned April 24-1971						
Aug 28	189	♂	(Coll. C.G. Sibley) Syconycteris	AH#6592 A	71-0-12.5-15 Test. 3×2.5 mm	16.7 gm
	190	♂	"	AH#6592 B	69-0-10.5-15 Testis 2×1 mm	14.6 gm
	191	♀	"	AH#6592C	69-0-11-16 No embryos	16.1 ~~17.8~~ gm
	192	♂	"	AH#6592D	74-0-13-16 Testis 5×4 mm	17.8 gm
Skinned April 26-1971						
	193	♀	"	AH# 6592E	71-0-10-14.5 No embryos	17.2 gm
	194	♂		AH#6592F	67.5-0-12-15 Test. 2×1.5 mm	16.1 gm
~~Embryo in abdom~~	195	♀		AH# 6592G	70-0-12-15.5 1 embryo 5×4 mm left uterus	17.4 gm
	196	♂		AH#6592H	69-0-13-14.5 Test. 2×2 mm	16.6 gm
	197	♀		AH# 6592I	65-0-12.5-15 No embryos	16.2 gm

Central Territory,
Brown River, Kerina Village, Papua, New Guinea
Aug 26-1969

Embryo in abc.	198	♀	(coll by R.G. Bauer & L Medway) Syconycteris	AH# 4835	71-~~0~~-0-12-15 Embryo 21+16 mm	18.1 gm
~~199~~			Central Territory			
			Brown River, Moroka Village, Papua, New Guinea			
~~200~~		~~♂~~	Aug 26-1969 (Coll. by R.G. Bauer & L Medway)	AH# 4827	~~71-0-12-15 Test 5×4 mm~~	
	199	♂	Syconycteris		71-0-12-15 Test. 5×4 mm	14.8 gm
Embryo in abc	200	♀	(coll by R.G. Bauer & L Medway) "	AH# 4830	69-0-13-15 Embryo 19×15 mm	17.3 gm

Saurere village, 4800 ft, vecinity of Garaina, 34 mi W, 8 mi S Moroke, Morobe District, New Guinea

Skinned April 29. 1971				~~Neo~~ Sept 3-1969		
	201	♀	(Coll. by ~~V. Sauch~~) Syconycteris	AH#1716	73-0-14-15 No embryo	18.4 gm
	202	♀	"	AH#1717	~~Embryo~~ 1 Embryo of 5×4 mm right uterus 69-0-13.5-13	17.2 gm
	203	♂	"	AH#1719	Test. 5×4 mm 69-0-12.5-13.5	16.3 ~~16.3~~ gm
	204	♀	"	AH#1720	69-0-12.5-13 No embryos	16.9 gm
Skinned April 30-1971				Sept 3-1969		
	205	♂	"	AH#1715	72-0-13-15 Test. 6×5 mm	18.7 gm

C. Mauriner
1971

Morobe District

Sauvere Village, 4800 ft, vecinity Garaina, 34 mi W, 8 mi S Morobe, (Cont)
Morobe District, New Guinea.

Sept 3 - 1969

Skinned - April 30-1971

206 ♂ Syconycteris (Coll by) — AH# 1718, 70-0-14-14 Test. 5 x 6 mm — 19.1 gm

207 ♀ Syconycteris (Coll. by) — AH# 1721, 70-0-13-15 1 Embryo 5x4 mm in right side — 16.9 gm

Garaina, 2200 ft, 34 mi W, 8 mi S Morobe, Morobe District, New Guinea.

August 28-1969

208 ♂ Syconycteris (Coll. by V. Sarich) — AH#1639, 67-0-13-13.5 Test. 2 x 1.5 mm — 14.2 gm

209 ♂ (Coll. by V. Sarich) — AH#1640, 63-0-12-14 Test. 2 x 2 mm — 14.2 gm

Skinned May 3-1971

August 29-1969

210 ♂ (Coll. by V. Sarich) — AH# 1648, 65-0-11-13 Test. 4 x 4.5 mm — 16.2 gm

Sept 1-1969

211 ♀ (Coll. by V. Sarich) — AH# 1697, 68-0-12-15 1 Embryo 2 x 2 mm in right horn — 17.8 gm

212 ♀ (Coll. by V. Sarich) — AH# 1699, 57-0-10-12 No embryo. — 11.1 gm

213 ♂ (Coll. by V. Sarich) — AH# 1700, 72-0-15-15 Test. 7 x 6 mm — 17.5 gm

Skinned May 4-1971

Sept 1-1969

214 ♂ Syconycteris (Coll. by V. Sarich) — AH# 1695, 65-0-11.5-13 Test. 2 x 2 mm — 13.6 gm

215 ♂ Syconycteris (Coll. V. Sarich) — AH# 1701, 72-0-12-14 Test. 7 x 7 mm — 19.1 gm

216 ♀ Syconycteris (Coll. V. Sarich) — AH# 1702, 71-0-11-17 No embryos. — 17.0 gm

Skinned May 5-1971

Aug. 28-1969

217 ♂ (Coll by V. Sarich) — AH# 1584, 67.5-0-13-14 Test. 1 + 1 mm — 14.5 gm

218 ♀ (Coll. by V. Sarich) — AH# 1585, 70-0-13-15 No embryos — 17.0 gm

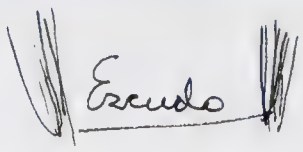
219 ♀ (Coll. by V. Sarich) — AH# 1586, 69-0-12.5-14. 1 Embryo 6 x 7 mm — 17.2 gm

220 ♂ (Coll. by V. Sarich) — AH# 1587, 70-0-12-16 Test. 6 x 6 mm — 17.0 gm

Sept 1-1969

221 ♂ (Coll. by V. Sarich) — AH# 1703, 71-0-13-15 Test. 1.5 x 2 mm — 15 gm

222 ♀ (Coll. by V. Sarich) — AH# 1704, 65-0-13-15.5 no embryos — 14.2 gm



15 €/D

65
38
103 : 15 = 6,8
130
10

C Mariner R
1971

Garaina, 2200 ft, 34 mi W, 8 mi S Morobe, Morobe District, New Guinea

			Sept 1-1969 (Cont)		
Skinned May 5-1971					
223	♂	(Coll. by V. Sarich) Sycongeteris	AH # 1705 68.5-0-13-14	Test. 2x2 mm	14.9 gm
224	♂	(Coll. by V. Sarich) Sycongeteris	AH # 1706 65-0-13-15	Test. 2x2 mm	14.5 gm
			Aug 28-1969		
Skinned May 6-1971					
225	♂	(Coll. by V. Sarich) Sycongeteris	AH # 1637 66-0-12.5-15	Test. 1x1 mm	12.8 gm
226	♀	(Coll. by V. Sarich) Sycongeteris	AH # 1638 65-0-13-14.5	No embryo	14.4 gm
			Sept 1-1969		
Skinned May 7-1971					
227	♂	(Coll by V. Sarich) Sycongeteris	AH # 1694 65-0-12-15	Test. 2x2 mm	14.8 gm
228	♂	(Coll. by V. Sarich) Sycongeteris	AH # 1696 68-0-13-16	Test 7x6 mm	17.5 gm
229	♂	(Coll. by V. Sarich) Sycongeteris	AH # 1698 63-0-11.5-16	Test 2.5x2 mm	15.3 gm
			Aug 29-1969		
Skinned May 10-71					
230	♀	(Coll. by V. Sarich) Sycongeteris	AH # 1655 68-0-12-15	No embryos.	15.9 gm
231	♂	(Coll. by V. Sarich) Sycongeteris	AH # 1656 70-0-12.5-15	Test. 3.5x2.5 mm	17.4 gm
232	♂	(Coll. by V. Sarich) Sycongeteris	AH # 1657 63-0-11-14	Test 1.5x1 mm	11.8 gm
233	♂	(Coll by V. Sarich) Sycongeteris	AH # 1661 66-0-12-15	Test 1.5x1.5 mm	13.2 gm
234	♂	(Coll by V. Sarich) Sycongeteris	AH # 1662 63-0-13-14	Test. 2x2 mm	12.8 gm
235	♀	(Coll. by V. Sarich) Sycongeteris	AH # 1663 70-0-12-14	1 Embryo 6x4 mm left side	18.8 gm
			Aug. 28-1969		
Skinned May 14-1971		"		Parasite insect - taken off	
Parasite insect in alcohol	236	♂ "	AH # 1634 70-0-13-15	Test. 6x5 mm	18.2 gm
Embryo in alcohol	237	♀ "	AH # 1635 67-0-12-14	Embryo in alcohol 1 Embryo 4x3 mm	15.2 gm
			Aug 29-1969		
	238	♂ " "	AH # 1644 59-0-13-14	Test 1.5x1.5 mm	12.8 gm
Embryo in alcohol	239	♀ " "	AH # 1645 69-0-12-15	Embryo in alcohol 1 Embryo 8x6 mm	14.9 gm
Embryo in alcohol	240	♀ "	AH # 1646 71-0-12-16	Embryo in alcohol 1 Embryo 20x17 mm	19 gm
			Aug 30-1969		
Skinned May 15-1971		"			
241	♂	" "	AH # 1664 57-0-13-13	Test. 1.5x1.5 mm	11.1 gm
242	♂	"	AH # 1665 71-0-13-14.5	Test. 6x6 mm	17.3 gm

C. Martinez R
1971

Garaina, 2200ft, 34mi W, 8mi S Morobe, Morobe District, New Guinea

Sept-1-1969 (Coll. by V. Saich)

Stained May 15-1971				
Embryo in alcohol	243	♀	Syconycteris	AH# 1707 71-0-12-13.5 1 Embry 7×6 in right side	16.9gm
	244	♀	"	AH# 1708 57-0-12-15 No embryos	11.5gm

Aug-29-1969

	245	♀	"	AH# 1654 68-0-14-16 No embryos.	15.7gm
	246	♂	"	AH# 1660 67-0-13-15 Test. 3.5×3.5 mm	15.4gm

Madang District

Wanuma, 2000ft, Adelbert Mtns., New Guinea

July 27-1969

Stained May 17-1971				
	247	♀		AH# 2907 65-0-12-16 No embryos.	13.6gm

July 28-1969

	248	♂		AH# 2917 68-0-12-15 Test. 4.5×4 mm	15.4gm

July 30-1969

	249	♂		AH# 2926 69-0-11-13 Test 6×6 mm	15.1gm
Embryo in alcohol	250	♀		AH# 2927 69-0-13-14 1 Embryo 4×3 mm right side	15.4gm
	251	♀		AH# 2928 66-0-12-15 No embryos	13.9gm

Aug-1-1969

Embryo in alcohol	252	♀		AH# 3069 71-0-12-16 1 Embryo 14×12 mm in right side	16.7gm
Embryo in alcohol	253	♀		AH# 3072 68-0-13-15 1 Embryo 8×6 mm in left side	15.7gm
	254	♀		AH# 3078 61-0-13-14 No embryos	12.9gm
	255	♂		AH# 3084 69-0-12-15 Test 6×6 mm	16.2gm
Embryo in alcohol	256	♀		AH# 3085 70-0-12-15 Embryo of 8×6 mm on right horn	15.2gm
	257	♀		AH# 3087 650-12-16 Embryo of 4×4 mm left side	13.6gm

Madang District

Wanuma, 1950 ft, Adelbert Mtns., New Guinea, Aug 1-1969

Embryo in alcohol	258	♀		AH# 2938 73-0-12-14.5 Embryo of 17×14 mm right horn	16.7gm

C. Martinez R.
1971

Western Highlands Terr.

Baiyer River, Tsauna Valley, 3800 ft, New Guinea

Skinned May 18-1971		July 31-1969		
259	♂	(Coll. by R.G. Baker)	AH #5020 70-0-14-16. Test. 6×6 mm	17.2 gm
260	♂	"	AH # 5021 66-0-14-15 Test. 5×4 mm	15.4 gm
261	♂	"	AH #5023 71-0-14-14 Test. 6×5 mm	15.9 gm
Embryo in alcohol. 262	♀	"	AH # 5024 71-0-12-14 1 Embryo of 3×4 mm & 1 Embryo of 2×2 mm in right horn.	16.8 gm
Skinned May 19-1971 263	♀		AH #5025 68-0-13-14 1 Embryo 5×5 mm in right horn.	16.8 gm
264	♂		AH #5027 55-0-12-14 Test. 1×1 mm	10.2 gm
		July 30-1969		
265	♀		AH#5953 71-0-12-15 No embryos	17.0 gm
266	♀		AH# 5955 64-0-12-15 No embryos	13.3 gm
267	♀		AH# 5956 67-0-13-14 No embryos	14.6 gm
Skinned May 20-1971		Aug-5-1969		
268	♂	(Coll. by V. Saiich)	AH#3253 67-0-14-17 Test. 6×5 mm	17.6 gm
		Aug-6-1969		
Embryo in alcohol 269	♀	(Coll. by V. Saiich)	AH# 3255 71-0-12-16 1 Embryo of 10×9 mm on left horn	17.7 gm
270	♀	(Coll. by V. Saiich)	AH# 3258 68-0-13-14 No embryos.	15.5 gm
Skinned May 21-1971		Aug-7-1969		
271	♂	(Coll by V. Saiich)	AH#3265 72-0-13-15 Test. 6×5 mm	18.7 gm
Embryo in alcohol 272	♀	(Coll by V. Saiich)	AH# 3266 70-0-13-15 1 Fetus of 20×17 mm on right horn	19.8 gm
		Aug 8-1969		
Embryo in alcohol 273	♀	(Coll. by V. Saiich)	AH# 3274 75-0-13-15 1 Embryo 23×15 mm on right horn	21 gm
		Aug 9-1969		
Left. ← Mites taken from wing. 274	♂	(Coll. by V. Saiich)	AH# 3277 66-0-13-15 Test. 2×2 mm	15.1 gm
275	♂	(Coll. by V. Saiich)	AH#3286 68-0-13-15 Test 6×6 mm	16.8 gm
Skinned May-25-1971		Aug. 12-1969		
276	♀	(Coll. by L.Z. Lidicker)	AH# 3308 66-0-12-15 No embryos	13.8 gm

C. Martinez R
1971

Baiyer River, Tsauna Valley, 3800 ft, New Guinea

Aug 13-1969

Skinned May 25-1971					
277	♀	(Coll by W. Z. Lidicker)	AH# 3314 70-0-13-15	No embryos.	16.6 gm
278	♂	(Coll by W. Z. Lidicker)	AH# 3320 69-0-14-14	Test. 1×1 mm	16.0 gm
279	♂	(Coll. by W. Z. Lidicker	AH# 3321 64-0-14-15	Test. 1.5×1.5 mm	13.7 gm

Aug 14-1969

280	♂	(Coll. by W. Z. Lidicker)	AH# 3125 63-0-13-15.	Test. 1×1 mm	14.0 gm

Aug 15-1969

281	♀	(Coll by V. Savich)	AH# 3337 71-0-13-15	1 Embryo 15×12 mm on left side.	18.4 gm
Embryo in alcohol Skinned May 27-1971 282	♀	(Coll. by V. Savich)	AH# 3338	1 Embryo of 6×4 mm on right side	17.3 gm
Embryo in alcohol 283	♀	(Coll. by V. Savich)	AH# 3339	1 Embryo of 5×3 mm on right side	16.9 gm
284	♂	(Coll by V. Savich)	AH# 3341	Test. 5×5 mm	16.4 gm
285	♀	(Coll. by V. Savich)	AH# 3342	No embryos	15.2 gm
286	♂	(Coll. by V. Savich)	AH# 3343	Test. 5×5 mm	15.8 gm
Embryo in alc 287	♀	(Coll. by V. Savich)	AH# 3345	1 Embryo 9×7 mm in ~~left~~ side.	19.2 gm
288	♂	(Coll by W. Z. Lidicker)	AH# 3348	Test. 2×2 mm	16.8 gm

Bubia Vic. Lae, Morobe District

Aug 28-1969

Skinned May 28-1971 289	♀	(Coll. by A. Brush	AH# 6883 74-0-12-15	1 apparently ded & half resorpt fetus on left side.	18.9 gm
Embryo in alc. 290	♀	(Coll. by "	AH# 6884 71-0-12-16	1 Embryo 12×8 mm on left side	17.6 gm
291	♀	(Coll. by "	AH# 6885 68-0-13-15	1 Embryo 4×3 mm on right side	16.8 gm
Skinned ~~Embryo in alc~~ May 31-1971 292	♀	(Coll. by "	71-0-12-15	1 Embryo 15×13 mm on right horn	17.3 gm
293	♂	(Coll. by "	69-0-12-15	Test 2×2 mm	~~17.8 gm~~ 15.7 gm
294	♂	(Coll. by "	69-0-13-15	Test. 5×5 mm	~~17.8 gm~~ 17.2 gm
295	♀	(Coll. by "	62-0-12-15	1 Embryo 4×4 mm on right side	14.1 gm
296	♂	(Coll. by "	72-0-12-16	Test. 7×6 mm	20.0 gm
297	♂	(Coll. by "	72-0-13-15	Test. 6×6 mm	18.1 gm

C. Mateñez R
1971

Bubia, ~~Vic~~ Lae, Morobe District, New Guinea

Aug 29-1969

Skinned June 1-1971					
Embryo in abc	298	♀	(Coll by A Bruce)	71-0-13-15	Embryo of 10×6 mm on right side with signs of resorption	16.2 gm
	299	♂	"	68-0-13-17	Test. 15×15 mm	15.6 gm
Skinned June 2-1971	300	♂	"	73-0-13-17	Test. 6×6 mm	18.2 gm
Embryo in abc	301	♀	"	70-0-11-15	Embryo of 14×10 mm on left side.	16.4 gm
	302	♂	"	70-0-12-15	Test. 5×5 mm	17.0 gm
	303	♀	"	63-0-11-14	1 Embryo 2.5×2.5 mm on left side.	13.3 gm
	304	♂	"	73-0-12-17	Test. 6×6 mm	17.7 gm
	305	♂	"	72-0-13-15	Test 4×4 mm	17.6 gm
	306	♂	"	71-0-13-15	Test 7×6 mm	16.4 gm

New Haven Museum 15 specimens

Skinned June 3-1971 Wipim, Western ~~Territory~~ District, Papua, New Guinea.

16 Aug - 1969

	307	♀	(Coll by L. Medway) AH# 3876	67-0-11-14	No embryos.	12.9 gm

Central ~~Territory~~ District

Subitana Est, Sogeri, Papua, New Guinea

Aug 22-1969

	308	♂	(Coll by) AH# 3915	68-0-12-16	Test 7×6 mm	15.4 gm
	309	♂	(Coll by) AH# 3918	70-0-12-16	Test. 5×5 mm	17.3 gm

Skinned June 4-1971 Alotau, Milne Bay ~~Territory~~ District, Papua New Guinea

Aug. 29-1969

	310	♀	(Coll. by AH# 3142	65-0-12-14	No embryos	13.3 gm
	311	♂	(Coll. by AH# 4825	70-0-13-15	Test. 7×6 mm	17.2 gm
	312	♀	(Coll. by AH# 4852	68-0-12-16	No embryos	15.3 gm

Subitana Est., Sogeri, Papua, New Guinea.

Aug. 22-1969

	313	♀	(Coll. by AH# 3917	70-0-13-15	Embryo of 5×4 mm right horn	18.2 gm

C. Martinez R
1971

Skinned June 4-1971

Wau, Bishop Museum Field Station, 3600ft Morobe District

Sept - 5 - 1969

314	♀	(Coll. by R. Bauer)	AH# 4518 74-0-12-15	Embryo 12 x 9 mm on left horn	17.3 gm
315	♀	(Coll by R. Bauer)	AH# 4521 75-0-13-15	Fetus 19 x 15 mm left horn	20 gm
316	♂	(Coll. by R. Bauer)	AH# 4524 68-0-12-17	Test 3 x 3 mm	16.3 gm
317	♂	" "	AH# 4525 72-0-12-15	Test 5 x 5 mm	16.5 gm
318	♀	"	AH# 4528 72-0-11-15	Embryo 7 x 7 mm right horn	16.1 gm
319	♂	"	AH# 4529 70-0-11-15	Test 6 x 6 mm	16.3 gm
320	♀	"	AH# 4530 72-0-12-14	Embryo of 3 x 2 mm left horn	17.0 gm

Skinned June 7-1971

Central District

Sogeri, Subitana Estate, Papua

Aug 22 - 1969

321	♀		AH# 3926 69-0-11-13.5	Embryo 4 x 4 mm. left horn	16.2 gm

Sempi, 13 mi N Madang, Madang District, New Guinea

Skinned June 21-1971

July 10 - 1969

322	♀	(Coll by ~~Sarich~~ Lidicker?)	(AH# 2644) 68-0-12-14	no embryos.	13.5 gm

July 28 - 1969

323	♂	(Coll. by V. Sarich)	(AH# 3000) 71-0-12-15		15.7 gm

July 29-1969

324	♂	(Coll. by V. Sarich)	(AH# 3016) 69-0-13-16		16.9 gm
325	♂	(Coll by V Sarich)	(AH# 3017) 69-0-12-15	Test 5.5 x 5.5 mm	15.9 gm

July 30-1969

326	♀	(Coll. by Sarich)	AH# 3037 57-0-12-14	no embryos.	9.0 gm
327	♂	(Coll. by V. Sarich)	AH# 3041 68-0-11-15	Test. 6 x 6 mm	16 gm
328	♂	(Coll. by V. Sarich)	AH# 3042 64-0-11-14	Test. 4 x 4 mm	12.8 gm
329	♂	(Coll by V. Sarich)	AH# 3044 69-0-12-15	Test. 5 x 4 mm	15.8 gm
330	♂	(Coll. by V. Sarich)	AH# 3047 72-0-12-15	Test 7 x 6 mm	16.6 gm
331	♀	(Coll. by V. Sarich)	AH# 3048 67-0-12-15	No embryos	13.0 gm
332	♂	(Coll. by V. Sarich	AH# 3049		

Skinned June 25. 1971

Skinned June 29 1971

C. Martinez R.
1971

Sempi, 13 mi N Madang, Madang District, New Guinea

July 31 - 1969

Skinned June 29-1971	332	♂	(Coll. by V. Sarich)	AH# 3049 75-0-12-14	Test. 6 x 6 mm 16.8 gm
	333	♀	(Coll. by V. Sarich)	AH# 3053 69-0-12-15	embryo of 4x3 mm on left horn 15.2 gm
	334	♂	(Coll by V. Sarich)	AH# 3054 69-0-12-15	Test. 4.5 x 4 mm 16.4 gm
	335	♂	(Coll. by V. Sarich).	AH# 3055 66-0-12-15	Test. 2.5 x 3 mm 13.2 gm

Aug 1-1969

Skinned July 1-1971	336	♀	(Coll. by V. Sarich)	AH# 3068 69-0-12-15	Embryo of 8 x 6 mm in right horn 13.7 gm

3 mi S Sempi, Madang District, New Guinea

May 3-1969

	337	♂	(Coll. by Dawson)	AH # 2519 65-0-11-14	Test. 6 x 6 mm 13.5 gm

Vic Sempi, Madang District, New Guinea

July 10-1969

	~~338~~		(Coll. by)		
	338	♀		AH# 2864 70-0-12-14	No embryos 12.5 gm

Passam Agric. Station, 8 mi S Wewak, Wewak District, New Guinea.

Aug 5-1969

Skinned July 2-1971	339	♀	(Coll. by L. Medway)	AH# 3590 69-0-12-13	Embryo 4x3 mm on right horn 12.1 gm
	340	♂	(Coll. by L. Medway)	AH# 3635 65-0-11-15	Test. 6 x 4 mm 15.8 gm
Skinned July 12-1971	341	♂	(Coll. by L. Medway)	AH# 3596 62-0-12-14	Test 1.5 x 1.5 mm 10.4 gm

Aug. 6-1969

	342	♀	(Coll by L. Medway)	AH# 3658 64-0-11-14	No embryos 13.5 gm

Aug. 7-1969

	343	♂	(Coll. by L. Medway)	AH# 3186 65-0-12-14	Test. 6 x 5 mm 14 gm

1 mi S Maiwara, ~~10~~ 9 mi N Madang, Madang District, New Guinea.

July 30-1969

Skinned July 13-1971	344	♂	(Coll. by V. Sarich)	AH# 3039 70-0-13-16	Test. 4 x 5 mm 15.5 gm
	345	♂	(Coll. by V. Sarich)	AH# 3040 77-0-13-17	Test 6 x 6 mm 20.0 gm

C. Martinez R
1971

Mairwara, 10mi N Madang, Madang District, New Guinea

Aug. 1-1969

Skinned July 13-1971	346	♀	(Coll. W.Z. Lidicker)	AH# 2939 68-0-12-15	No embryos	15.1 gm
	347	♂	(Coll. W.Z Lidicker)	AH# 2940 67-0-12-14	Test 6x7 mm	15.5 gm
Skinned July 14-1971	348	♀	(Coll V. Sarich)	AH# 3092 65-0-12-14	1 Embryo 14x12 mm on right horn	13.2 gm

July 28-1969

	349	♀	(Coll V. Sarich)	AH# 3007 68-0-11-15	1 Embryo 6x4 mm on left horn	14.8 gm

Aug. 2-1969

	350	♀	(Coll. by W.Z Lidicker)	AH# 2934 70-0-13-16	1 Fetus 20x13 mm on left horn	19.7 gm
	351	♀	(Coll. by V. Sarich)	AH# 3099 72-0-13-16	1 Embryo 9x7 mm on right horn	15.2 gm
	352	♂	(Coll. by V. Sarich)	AH# 3100 71-0-11-15	Test. 7x6 mm	15.2 gm
	353	♀	(Coll. by V. Sarich)	AH# 3101 68-0-12-16	1 Embryo 11x8 on left horn	15 gm
	354	♀	(Coll. by V. Sarich)	AH# 3102 74-0-13-17	1 Embryo 14x12 mm on right horn	18.4 gm
Skinned July 15-1971	355	♀	(Coll. by V. Sarich)	AH# 3103 71-0-13-15	1 Embryo 11x7 mm in left horn	17. gm
	356	♀	(Coll. by V. Sarich)	AH# 3104 72-0-12-17	Test 8x8 mm	18.2 gm

Aug 7-1969

Australian museum	Skinned July 16-1971	357	♀	(Coll. by)	AH# 74-0-12-16	Embryo 15x10 mm on right horn	13.3 gm
		358	♀		67-0-12-15	Embryo 3 ~~5~~ x ~~5~~ 3 mm left ~~right~~ horn	17.3 gm
		359	♀		66-0-13-13 ~~68-0-12-15~~	Embryo ~~4~~ 4 x ~~4~~ 4 mm right ~~left~~ horn	14.2 gm
		360	♀		70-0-12-14	Embryo 17x7 mm ~~left~~ right horn	14.4 gm

Laboratory Genetics Animal House, U. Calif., Berkeley, Alameda Co. Calif.

Skinned 22-Sept. 71	361	♀	Microtus californicus (Buffy mutant)	Born Oct 11, 1970 178-49-20-17	(Descendent of Brooks Island)	54.3 gm
	362	♀	" " "	179-46-19-15	Son of 67 J.C. Hafner	70.4 ~~75.3~~ gm
	363	♂	" " "	200-57-23-17		75.3 ~~75.3~~ gm

UC Berkeley Campus, Alameda Co, California

*Body in alcohol	364	♀	Lasiurus cinereus (Coll. by P. Myers)	April 18-1972 148-63-12-18	(2 embryos of 12x11 mm on each side)	27.6 gm

.3 mi E Mare Island Bridge, adj. White Slough + State Hwy. 37, Solano Co, Calif.

Skinned April 18, 1973, Collected April 6

365	♂?	Sorex	113 – 36 – 10 – 8 = 7.1 gm Teeth 5 x 4 mm
366	♀	Reithrodontomys	166 – 91 – 16.5 – 14 = 11.8 gm 4 embryos (2 mm)
367	♂		150 – 79 – 16 – 14 = 11.3 gm Teeth 7 x 4 mm

Martinez R., C.

1970

catalogue

#16 - #179

Peru

C. Martínez R.
1970

Catalogue

#6 Maiwara, 10 mi N Madang, Madang District, New Guinea
July 25-1969 (Skinned July 22-70)

AH 2883 (Coll by W. Liedicker) (1 emb. x 26 mm)

16 ♀ Rousettus amplexicaudatus 81.7 g 143-17-20-21

Pariñas, 7 Km N & 15 Km E of Talara, 100 feet, Depto. Piura, Perú.

Aug. 2-1970

			g.
17	♂ Mockingbird	Testis 3×1.5 mm Ad. Sk. No fat	Weight 62.0
18	♀ Green Woodpecker	Ovary not enlarged. Adult skull. No fat	" 52.0
19	♀ Red Woodpecker	Ova not enlarged. Adult skull. No fat.	" 25.0

Aug. 3-1970

20	♀ Dendrocolaptydae	Ova not grown. Ad. skull. No fat	" 26.5
21	♂ Vermillion flycatcher	Testes 2×1 mm Ad. skull. no fat.	" 11.5
22	♀ Furnariidae	Ova not grown. adult skull. no fat.	" 9.0

Aug. 4-1970

Fondo, 14 Km N and 13 Km E of Talara, Depto Piura, Perú

23	♂ Hummingbird,	Testes 2×1.5 mm. Adult skull, no fat.	" 4.0 g
24	Geositta,		" 17.0 g
25	"	Mesolo. Specimen destroyed	" 18.5 g
26	♀ Vermillion Flycatcher.	Ova not grown. Adult skull. no fat.	" 11.0 g
27	♀ Flycatcher.	Ova not grown. Adult skull. No fat.	" 12.0 g
28	♀ Flycatcher (Torito or cachudito)	Adult skull. Ova not grown. No fat.	" 9.0 g

Aug 5-1970

29	♂ Hummingbird,	Testes 2.0 × 1.8 mm. Adult skull. No fat	" 4.5 g
30	♀ Hummingbird,	Ova not grown. Adult skull No fat	3.8 g
31	♀ Sylviidae,	Ova not grown. Adult skull. No fat	5 g.
32	♀ Flycatcher	Ova not grown. Adult skull. Moderately fat.	11.0 g

C. Martínez
1970

Catalogue.

Río de Olmos, 1800 ft, 5km N and 20 km E of Olmos. Depto. Lambayeque.

33 ♀ Parulidae. Ova not grown, Adult skull, no fat. Weight 6.5g. (August 7-1970)
34 ♀ Coerebidae. Ova not grown, adult skull, no fat. Weight 7.5g.
35 ♀ Flycatcher. Ova not grown, adult skull, no fat. Weight 5.5g.
36 ♂ Hummingbird. Testes 0.8 × 0.8 mm, adult skull, no fat " 4.5g
37 ♀ Flycatcher, Ova not grown, adult skull, no fat. " 6.5g

August 8..

38 ♀ Mockingbird. Ova not grown. Adult skull, no fat (Coll by R.E Jones) Wt. 56.0g.
39 ♂ Red Woodpecker. Testes 4 × 2.5 mm Adult skull. no fat 29.0g
40 ♂ Blue-green parrot. Testes 3 × 2 mm Adult skull. no fat. 30.0g.
41 ♀ Bat (Phyllostomatid) 93-17 (Caudal patagio)-16-17. No embryos. (Collected by R.E. Jones) 25.5g.
42 ♀ Bat. 138-7-11.5-26. No embryos. 29g.

August 9

In formalin
43 ♀ Bat (Phyllostomatid) 99-21 (Caudal patagio)-16-20 (Collected by R.E. Jones) 34g.
44 Cricket frog.

August 10

45 ♀ Bat (Phyllostomatid) 99-21 (Caudal patagio)-16-20 (Coll. by R.E Jones) 33g

3.5 Road miles SE of Corosha, 6900 ft, Depto. Amazonas, Perú
(August 13 & 1970)

Skeleton only
46 Sex? Flycatcher. Juvenal skull, no fat. (Coll. by R.E Jones) 9.5g.
47 ♂ Cyanocorax yncas, Adult skull. Testes. 3.5 × 2.5 mm no fat (Coll by R.E Jones) 91.5g
48 ♀ Turdid. Adult skull. Ova not grown. No fat (Coll by R.E. Jones) 162.0g

C. Martínez
1970

Catalogue

3.5 road miles SE of Corosha, 6900 ft. Depto. Amazonas, Perú

August 14th

49 ♂ Flycatcher. Testes 1.5×1.0 mm. Soft skull. No fat. Weight. 8.5g

~~50~~ ♂ Tanager. Testes 2.5×2 mm. Adult skull. No fat. 15.5g

51 ♂ Diglossa. Testes 2×1.5mm. " Traces of fat. 11.5g

52 ♂ Zonotrichia Testes 2.5×2mm " No fat. 20.5g

53 ♂ Grosbeak. Testes 2×1 mm. Soft skull. No fat. 48.0g

August 15

54 ♂ Thraupidae. Testes 1×1mm. Adult skull no fat 12g.

55 ♀ Mouse. Vag. closed. 155-96-19-13 5.8g

56 ♂ Bat (Phyll- Stomatidae) 71 -10-14-19 Testes 6×3.5mm (Coll by N.K. Johnson) 18g.

57 ♂ Bat (" ") 80-16.5-13-20 Testes. 6×4 mm (Coll by N.K. Johnson) 19g

58 ♂ Parulidae. Testes 1×0.8 mm. Adult skull. No fat. 18g.

Aug. 16

59 ♂ (Canchulo) Marsupial, 836-410-64-54 Testes 30×16 mm (Brought by a native) 1,640g.

60 ♂ Bat. 59-0-14-~~16~~ 16.5 Testes 4.5×3.5 mm (Coll by N.K Johnson) 14.0g

61 ♀ Bat, 63-0-13-18 1 Fetus 1.7×1.3 mm (Coll by N.K Johnson) 19.5g

Aug 17

62 ♀ Hummingbird. Ova not grown. Adult skull. No fat. 6.0g

63 ♀ Bat 64-0-13-15 No embryos. (Coll. R.E Jones) 15g

64 ♂ Sparrow. Testes 2×1.5mm. adult skull, no fat. 25g

65 ♀ Sparrow. Ova not grown. Adult skull. no fat (Coll by R.E. Jones) 27g

66 ♂ Tanager. Testes 6×4 mm. Adult skull. no fat. (Coll R.E Jones) 43g.

67 ♀ Diglossa Ova not grown. Adult skull. No fat. (Coll by R.E Jones) 10g.

C. Matteucci
1970

Catalogue

3.5 road miles SE of Corroshca, 6900 ft. Depto. Amazonas, Perú.

Aug 18

68 ♂ Hummingbird, Testes 2.8 x 1.8 mm. Adult skull. No fat. Wt. 8.0 g
69 ♀ Bat 71-7-12-19, 1 Embryo of 3 mm of diameter. 17.0 g
70 ♂ Furnarid, Testes 8 x 5 mm No fat. 27 g
71 ♂ Toucanet. Testes 7 x 3 mm. Adult skull. No fat (coll. by R.E. Jones) 195 g

Aug 19

72 ♂ Black headed bird (Red start) Testes 7 x 5 mm. Adult skull. No fat. 9 g
73 ♀ Tyranid. Ova not grown. Adult skull. No fat. 10 g
74 ♂ Tyranid. Testes 1 x 0.5 mm Adult skull. No fat. 10.5 g
75 ♀ Furnarid. Ova not grown. Adult skull. No fat. 27.0 g.
76 ♀ Bat 58-0-10-16 No embryos. 14. g
77 ♀ Bat 73-14-12-19 1 Embryo 3 mm. 18 g
78 ♀ Bat 69-14-13-19 No embryos. 16 g
79 ♂ Hummingbird. Testes 2 x 1.5 mm Adult skull. No fat. 6.8 g
80 ♂ Tyranid (Elania). Testes 6 x 4 mm. Adult skull. No fat 16.2 g.

August 20

81 ♂ Piculet Testes 2.5 x 2 mm. Adult skull. No fat. 11.0 g
82 ♂ Parulid. Testes 1.5 x 1.5 mm. Adult skull. No fat. 15.5 g
83 ♀ Bat, 72-12-12.5-20. 1 embryo of 3 mm. 16.5 g

Wooded valley at 3000 ft. 5 mi SSE of Saén, Depto. Cajamarca, Perú

Aug 22

Wgt.
84 ♂ Squirell cuckoo. Testis 3 x 2 mm. Ad. skull. No fat. (coll. by R.E. Jones) 109 g.

C. Martínez
1970

Catalogue

5 mi SSE of Jaén, 3000 ft., Depto. Cajamarca, Perú.

August 22 (Continued)

			Wt.
85	♀	Anis, Ova not grown, Adult skull. No fat. (Coll. R.E. Jones)	80.g.
86	♂	Flycatcher. Testes 3×1 mm. Adult skull. No fat.	27 g.
87	♀	Furnariid, Ova not grown. Adult skull. No fat.	23 g
88	♂	Furnarid, Testes 2×1 mm. Adult skull. No fat.	24. g

August 23

89	♂	Finch. Testes 1×0.5 mm. Adult skull. No fat.	10 g
90	♀	Flycatcher. Ova not grown. Adult skull. No fat.	7 g
91	♂	Flycatcher. Testes 2×1 mm. Adult skull. No fat.	15.5 g
92	♂	Green Jay. Testes 3×2.5 mm. Adult skull. No fat.	81. g.

August 24

93	♂	Antshrike. Testes 1.5×1 mm. Adult skull. No fat. (Coll by N.K Johnson)	17.5 g

2.5 mi S Pto. Tamborapa, 2000 ft, Depto. Cajamarca

August 25

			Wt.
94	♂?	Flycatcher. — Adult skull. No fat.	9,5 g
95	♂	Finch. Testes 4.5×2.5 mm. Adult skull. No fat.	35 g
96	♂	Squirrell Cuckoo Testes 6×2.5 mm. Adult skull. No fat.	103 g

August 26

97	♂	Flycatcher Testis 2.[illegible]×1.5 mm. Adult skull. No fat.	8 g
98	♂	Flycatcher Testes 1×0.5 mm. Adult skull. No fat.	7 g
99	♀	Furnariid Ova not grown. Adult skull. No fat	23 g
100	♀	Yellow finch Ova not grown. Adult skull. No fat	25 g

C. Martínez
1970

Catalogue

2.5 mi S Pto. Tamborapa, 2000 ft., Depto. Cajamarca, Perú.

August 26 (cont).

			Ult.
101	♀	Flycatcher. Ova not grown. Adult skull. No fat.	6.8 g
102	♂	Tody flycatcher Testis 1×0.5 mm Adult skull No fat. (Coll. R.E. Jones #352 in his catalogue)	6 g.

August 27

103	♂	Tody flycatcher Testes 2×1 mm. Adult skull. No fat.	6.0 g
104	♂	Caprimulgid Testes 9.5×6 mm Adult skull. No fat [Crop full of beetles]	53 g

5 mi S Pto. Tamborapa, 2300 ft., Depto. Cajamarca, Perú

August 28

105	♀	Finch. Ova not grown. Adult skull. No fat.	23.5 g.
106	♀	Red Tanager Ova not grown. Adult skull. No fat. (Coll. Ned K. Johnson)	13.5 g.
107	Sex?	Red Tanager. — Adult skull. No fat (Coll. Ned K. Johnson)	15 g.
108	♀	Furnarid Ova not grown " " (Coll. Ned K. Johnson)	25 g

10 Km. WSW Bagua Chica, 1700 ft. Depto Amazonas, Perú

August 29.

109	♂	Big lizard
110	♀?	Bufo sp

August 30

111	♀	Flycatcher. Ova not grown. Adult skull. No fat.	7 g.
112	♂	Hummingbird. Testis 3×2.5 mm. Adult skull. No fat.	6.5 g
113	♂	Coereba. Testis 8×5.5 mm. Adult skull. No fat.	11 g.
114	♂	Coereba Testis 5.5×4 mm. Adult skull. No fat.	12 g.

C. Martínez
1970

Catalogue

10 Km. WSW Bagua Chica, 1700 ft., Depto. Amazonas, Perú

August 30 (cont)

115	♂ Flycatcher	Testis 2×1 mm. Adult skull. No fat	25g.
116	♀ Cactus wren	Ova not grown. Adult skull. No fat.	27g

August 31

117	♂ Nectar eating bat	65-5-11-16.5 Testis 5×4 mm.	10g.
118	♂ Hummingbird	Testis 3.5×2.5 mm. Adult skull. No fat.	6g.
119	♂ Flycatcher.	Testis 3×1.5 mm Adult skull. No fat.	26g
120	♂ Cactus wren	Testis 6×3.5 mm. Adult skull. No fat.	34g
121	♀ Cactus wren	Ova minute Adult skull. No fat	27.5g
122	Hummingbird		5.5g.
123	♂ Dove	Testis 6.5×3 mm. Adult skull. No fat.	37g.

12 road miles SSW Nazareth, 1100 ft., Depto. Amazonas

Sept. 2.

124	♂ Tanager	Testis 1×0.8 mm. Adult skull. No fat.	15.5g.
125	♂ Wattle bird.	Testis 4×3 mm Adult skull. No fat	48g.
126	? Formicariid	Juveal skull. No fat	66g
127	♂ Barbet	Testis 3×2 mm Adult skull No fat	65g
128	♂ Bat	72-16.5-14-21 Testis 3.5×2.5 mm	16g.
129	♂ Bat	79-12-14-21 Testis 2.5×1.5 mm	18g
130	♀ Bat	76-12-14-22 No embryos.	19g
131	♀ Bat	72-10-14-21 No embryos	18g.

C. Matuñez
1970

Calalogae

½ road miles SSW Nazareth, 1100 ft. Depto. Amazonas, Perú.

Sept. 3

			Wt.
132	♂	Pipridae ~~♀~~ Testis 1.5×0.5 mm. Adult skull. No fat.	9 g.
133	♂	Marsupial 313-190-205-24 Testis 7.50×6 mm.	45 g
134	♂	Hummingbird. Testis 1×0.5 mm. Adult skull. No fat.	4.5 g
135	Sex?	~~Tapaculo~~ antwren. — Adult skull No fat.	18 g.
136	♂	Furnarid. Testis 1.5×1 mm Juvenal Skull. No fat	24 g
137	♂	Ant bird Testis 2×1 mm Ad Adult skull. No fat.	17 g.
Alcohol 138		Tanager.	27 g

Sept. 4

139	♂	Tucan Testis 7+5 mm Adult skull. No fat		150 g
140	♂	Barbet Testis 2.5×1.5 mm. "	(Coll R.E. Jones)	65 g
141	♀	Finch. Ova not grown. Adult skull. No fat		18 g.
142	♀	Swallow Ova not grown. Juvenal skull No fat.	(Coll R.E Jones)	7.5 g.
143	♂	Pipirid Testis 2×1 mm. Juvenal skull No fat.	(Coll. R.E Jones)	14.5 g
144	♀	Flycatcher Ova minute Juvenal skull. No fat.	(Coll. R.E Jones)	16 g.

Sept 5

145	♀	Bat 63.5-3.5-10-14 No embryos.		9.5 g.
146	♀	Bat 61-4-11-14 No embryos.		8.5 g.
147	♀	Bat 69-9-14-21 No embryos.		20.5 g.
148	♀	Bat 70-12-12-22 No embryos		16 g
149	♀	Bat 65.5-10.5-12-20 No embryos.		15 g.
150	♂	Bat 76-0-15-21 Testis 6×4 mm.		32 g
151	♀	Bat 92-0-20-25.5 No embryos.	(Coll. R.E. Jones)	59 g
152	♂	Formicariidae. Testis 2.5×1.5 mm Ad. skull. No fat.		14.5 g.

C. Martínez
1970

Catalogue

12 road miles SSW Nazareth, 1100 ft., Depto. Amazonas, Perú.

Sept 5 (Cont)

			Wt
153	♂	Furnariid. Testis 1 x 0.8 mm. Juvenal skull. No fat.	15 g.
154	♂	Flycatcher Testis 9 x 4 mm Adult skull. No fat.	26,5 g
155	♀	Bat. 55 - 0 - 10.5 - 13 No embryos.	11.5 g
156	♂	Tanager Testes 4 x 2.5 mm No fat Adult skull.	26.5 g

Sept. 6

157	♂	Bat 75 - 0 - 13 - 18 Testis 6 x 5 mm.	18[illegible] g.
158	♀	Bat 78 - 13 - 15 - 19 No embryos	16.5 g
159	♂	Hummingbird Ad. skull. Testis 3.5 x 2.8 mm No fat.	4.8 g.
160	♂	Flycatcher. Testis 5 x 3.5 mm Adult skull No fat.	8 g.
161	♂	Flycatcher Juvenal skull. Testis 1 x 0.5 mm. No fat.	11.3 g.

Sept 7

162	♀	Tanager. Ova minute, Adult skull. No fat.	24.5 g
163	♂	Tanager. Testis 1 x 0.8 mm. Adult skull. No fat.	25.5 g
164	♀	Pipridae. Ova minute. Juv. skull. No fat	14 g.
165	♂	Hummingbird. Testis 2.5 x 2 mm. Juv. Skull. No fat	4.5 g.
166	♂	Flycatcher Testis 1.5 x 1 mm. Juv. Skull. No fat	11 g.
167	♀	Bat 80 - 0 - 19 - 26 No embryos (Coll. R.E. Jones)	50 g
168	♀	Bat 45 - 0 - 9 - 13 No embryos.	7 g
169	♂	Bat 56 - 7 - 11 - 13 Testis 5.5 x 3 mm.	8.5 g

Sept 8

170	♀	Bat 94 - 0 - 20 - 26 No embryos	63 g.

C. Martínez
1970

Catalogue

Río Huancabamba, 3000 ft Elt., 7 mi. WNW Pucará, Depto. Cajamarca, Perú.

Sept 9

~~177~~	~~178~~	♀ Hummingbird. Ova minute. Adult skull. No fat.	6.5 g
alcoholic 171	172	Tapera	47 g
173		♀ Icteridae, Ova minute. Adult skull No fat	36 g
174		♂ Green Jay, Testis 3.5 x 2.5 mm. Ad. skull. No fat.	88 g.
175		♀ Green Jay. Ova small. Adult skull. No fat	82 g
176		♂ Tapera. Testis 5 x 2.5 mm. Ad. skull. No fat (bll. R-E. Jones)	49 g.

Río de Olmos, 1800 ft, 5 Km N and 20 Km E of Olmos. Depto Lambayeque, Perú.

Sept. 10

177	♀ Flycatcher. Ova minute. Adult skull. No fat.	9.5 g
178	♂ Parulid. Testis 1 x 1 mm. Adult skull. No fat.	6.5 g
179	♂ Flycatcher Testis 1.5 x 1.5 mm. Ad. Skull. No fat.	11.5 g

Martines R., C.

1970

Journal

Peru

C.M.R.
1970

Itinerario

Julio 31

Lomas de Lachay. 12 mi N.E. de Chancay, Depto Lima

Después de una agradable noche de profundo sueño, despertamos aproximadamente a las 6 A.M. El paisaje corresponde a un desierto pedregoso con muchas rocas de aprox. 1 m³ desparramadas. Los cerros tienden a ser cónicos y tienen matas de cactus (Cereus ?) de color oscuro y puntas amarillentas. La altura de cada mata alcanza como máximo ± 1 m. Varios crecen al borde de los rocas y son especialmente abundantes en las laderas aluviales. Algunos están muertos y en proceso de descomposición. Líquenes amarillos de aspecto coriáceo crecen en algunas rocas y entre las puas de algunos cactus. Líquenes anaranjados, duros y muy coriaceos crecen en las rocas. Líquenes ramificados o coriaceos de color verde amarillo son también abundantes, especialmente en las rocas. La vegetación parece ser más abundante en la ladera que recibe menos sol en la tarde (información de Dr. Koford). Día nublado, la neblina permanece elevada cubriendo las cimas de los cerros (100 a 150 m de altura). La temperatura es aproximadamente 15°C.

Dejamos el lugar después del desayuno a las 7.30 A.M. y nos dirigimos a la carretera

C.M.R.
1970

July 31

Itinerario

Lomas de Lachay. 12 mi NE de Chancay, Depto Lima que va de Churrin a la carretera panamericana ~~en la costa~~ cerca de la costa. Algunas pocas y desparramadas matas del arbusto llamado Capparis estaban a la salida del valle. Las hojas son ± coriaceas parecidas a la "manzanita" de California. Otras pocas matas secas se observan alrededor.

Reserva Forestal: Bosque de Lachay. Reserva del Departamento Forestal La Casa. Lima Hora 8.20 AM
A la altura del km 90 desde Lima, doblamos al Oeste de la carretera panamericana por un camino arenoso. La altura del área es aproximadamente 1000 pies. Vamos por una llanura arenosa en medio de la densa neblina. La arena esta muy húmeda y ya comienza a cubrirse de un verde manto de plantas muy bajas entre las cuales se destacan liliáceas y pequeñas enredaderas de aspecto de Leguminosas, pero con flores actinomorfas. Perdicitas cordilleranas (más de 20 thinocoridae y 1 ground dove) vuelan en cuanto se aproxima el camión. Podemos además identificar el canto de un red breasted meadowlark y de los Zonotrichia. Algunas golondrinas salen volando también cuando se aproxima el camión

C.M.R.
1970

Itinerario

Julio 31

Reserva Forestal: Bosque de Lachay. Reserva del Depto. Forestal La Casa. 90 Km N to Lima, Depto Lima

Despues de aproximadamente 1 km, llegamos a la entrada del Parque. Un nativo nos abre la puerta. El camino está bordeado de plantas ornamentales como ágaves, eucaliptos y Casuarinas. La humedad de la neblina es intensa y el agua gotea copiosa de los arboles. Lagunas y abundantes musgos crecen en la cortza y la vegetación del suelo es ahora mucho más abundante, como un alto césped. Las aves son más abundantes, especialmente Zonotrichias. El canto de estos meadowlarks se puede oir de nuevo. Después de caminar y observar por unos minutos, volvemos a la carretera. De nuevo observamos los abundantes seed snipes y 1 Cinclodes (identificado por Dr Koford por sus blancas marcas bajo las alas) en la parte que está entre el parque y la carretera panamericana. 8.35 AM.

Agosto 1º

Desierto de arena 4.5 mi E to Mocupe, Dept Lambayeque.

Despertamos a las 6 A.M. y después del desayuno exploramos las areas cercanas al camper. T° muy agradable (60°F.) a las 6.40 AM, pero cuando recien abríamos los ojos fue más o menos 45 o 50°F. Es un desierto más bien húmedo, pero la arena luce seca.

♂

1 cm.

♀

Seed

Fruit

Capparis from sandy desert. Dept. Lambayeque.

C.M.R.
1970

Journal.

Agosto 1°

Desierto de arena 4 to 5 mts E. to Mocupe, Depto Lambayeque.

Small hills no bigger than 3 m. high and 10 m long are scattered. The flat sand forms waves no more than 80 to 90 cm apart, they are parallele waves probably created by the wind.

The Capparis grows on the hills but not in the flat areas. The Capparis forms bushes of woody and short branches. The leaves are long (10 cm long), of xeroplytic type, and narrow ~~like~~ leathers. The flowers grow in small umbella like inflorescences, complex corimbos. Some branches give ♂ flowers and another just ♀. Impossible to know if one plant produce both sex or not, because the main body is underneath the sand. The flowers ♂ have many long stamens and unconspicuous corolla (4 petals). The ♀ flowers have short stamens and a long pistil ~~with~~ which finish in a thik tip. Fruits are ovoid an ± 10 cm long divided in 4 sections (at least the skin). The seeds are in the interior in an structure similar ó a ~~one~~ pine cone.

Many animal traks can be observed in the sand. Among the most numerous are: Dusicyon (fox), lizards (Teiidae), big arthrops (giant scorpion, big beetles, etc),

Aspect of one of the trees at Pariñas.

Aspect of one gravel & sandy way at Pariñas.

C. Martínez
1970

Journal.

Augst 1

Sandy desert, 4-5 mi SE to Mocupe, Dept. Lambayeque. Bureinidae (Thick-knees), etc). Dr. Kofort told us that Burhinus complements its diet of mice & lizards with the fruits of Capparis. After breakfast we went to check the snap traps we set in the night. Only one Mus musculus was caught.

Quebrada de Pariñas, ~~7 Km NE 15 Km E. Talara, Piura~~ 100 ft. Dept. Piura

At 5 PM. we got the edge of the canyon which is aprox. 500 m wide and 100 m deep. The steeped edges are dry, with almost no vegetation and eroded giving the aspect of bad lands. The flat bottom is covered by trees and spiny bushes. The trees are mesquite type and branches came almost from the ground in a fan type. The habitat corresponds to the mesquite woodland. The quebrada is now dry and the ways of the water are sandy and gravel ways which separate islands of mesquite. Among the trees there are some dense vines which cover complete the nearby trees. They look dry, however some branches are still with green leaves. Many birds are present at our arrival: Vermillon flycatcher, mockingbirds, swallows, finches, etc.

C. Martínez
1970

Journal

Aug. 1 Quebrada de Pariñas, 7 Km N & 15 Km E. Talara, 100 ft. Dep. Piura.

In the night it was ponible to see at least 3 Dusycions in the dark. They were atracted by our wistleb and at least one was shot by Koford's kid and other came very close to me when I was wistling and illuminating him with a flash light. After the fox sat down, he kept looking at me until I was 15 m of distance. Then he moved and searded for refuge amonothe bushes. Some small bats were also flying around us many times.

Some wisthles came also from the trees, but we could not identify or see the bird which produced them.

After a walk en which we get some familiarity with the habitat and we tried to see some animals, we had a dinner and went to bed at aprox. 10.30 PM under a transparent sky.

Aug. 2 The T° was ~~very~~ cold at 6 A.M. but improved being later very hot.

We awoke at 6 A.M. and after breakfast we went (Dr Johnson and me) to hunt some birds. At 8 A.M. we went south to the main spring and walked among the trees. Many species of birds were flying and singing among us: The paradise of ornithologists. Since the canopy is not

C. Martinez
1970

Journal

Aug. 2 Quebrada de Pariñas 7 Km N & 15 Km E Talara 100 Mts Dept. Piura
very dense, the trees are very scattered and the birds are very tamed, it was very easy to get close and to shot them. Species seen: Mockingbird, which seems much more terestrial than the N. American; Cactus wren, very noisy with their calls an from which we saw a couple engaged in either a fight or a copulation in the ground for ± 5 minutes; Small Sylviidae, with dark head and long tail; small Formicariidae with typic long legs and short tail; Coerebidae (1); finches with black head and yellow bill; green woodpeckers; red woodpeckers; Dendrocolaptidae; Furnariidae (to which were refered the big (1 cubic foot or more) nest like structures, made of small twigs with a lateral or superior opening and placed in the branches of several trees); turkey vultures and black vultures perched atop the mesquite trees and gleading; swallows; small and grey flycatchers, etc., etc.

We shot green woodpeckers, red woodpeckers, mockingbirds, Formicariidae, Flycatchers and Dendrocolaptidae. We came back to the camp at 10.30 and started preparing the specimens. We finish by 4 P.M.

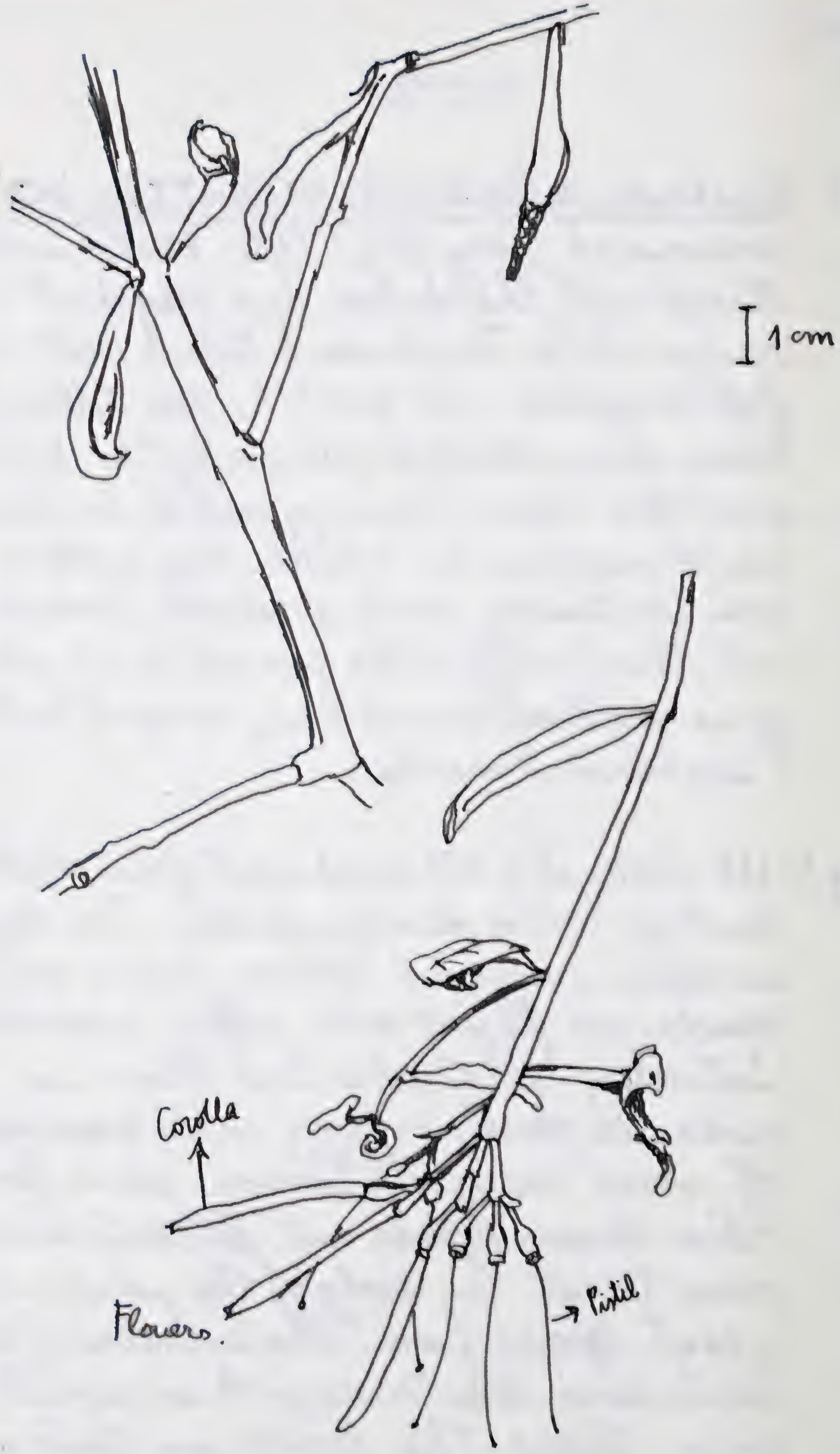
The afternoon continued being sunny and

C Martinez
1970

Journal

Aug. 2 Quebrada de Pariñas, 7 Km N & 15 Km E Talara. 100 ft. Dept. Piura. warm and very dry. After 7.30 PM we were through with the dinner and stayed at the camp while Ds Johnson & Koford went to the field to explore. At 9.30 PM, the little foxes (2) came close attracted perhaps by the light and the noise. They approached as much as 100 m. when we whistle. One walked very cautiously and eventually looked at us, then sniffed the ground and when we walked toward him, escaped to the bushes in 5 minutes.

Aug. 3 We awoke at 6 A.M. and went for a short hunting to the nearby bushes. The day is clear, sunny and warm. Again many birds are flying and calling around. Interesting is to notice that there are parasitic plants growing in the branches of some mesquite trees on whose flowers the hummingbirds and ~~Dicae~~ Coerebidae come to eat. The body of the parasitic plant grows from the branches of the hosts and then ramified in several green twigs. The leaves are thick and leather like (5 cm long). The flowers are tubular and very narrow (3 cm long and



Detail of the parasitic plant.
Pariñas, Dept. Piura. Peru

C. Martínez
1970

Journal.

Aug 3 Quebrada de Pariñas, 7 Km N & 15 Km E of Talara. 100 ft. Dept. Piura
4 mm wide). The corolla is intense red, the same as the pistil and stamens. The flowers grow in small inflorescences.

It was also interesting to see the camouflage of the Furnariid Geositta. This is a small passerine (solitary), very terrestrial whose body and legs are very whitish, so it is very hard to see him when running over the (light) grey stony conglomerate in the bottom of the dry spring.

I could hunt 3 birds by shooting: 1 Vermillion Flycatcher, 1 Dendrocolaptidae and 1 Furnariidae. At 1.30 P.M. I was through with the preparation of the specimens at 4. PM. we left the place.

Aug 3. Fondo, 14 Km N. and 13 Km E of Talara, Depto Piura, Perú.
After crossing a very desertic area, with many canyons and hills of ~~san~~ light grey-brown conglomerate and sand, we finally arrived to the Fondo canyon at 4.45 PM. We choice a site not far (150 mt) to the dry river bed and after camping, we went back to Talara for food and other goods (sawdust), We went to bed at 10 PM after the nets were set. The place looked more variable in vegetation and the soil more dusty.

C. Mortimer
1970

Journal

Aug 4. Tondo, 14 Km N and 13 Km E to Talara, Depto Piura, Perú.
As usual, we awoke by 6 AM and after breakfast I went to hunt with Bob Jones. The exploration revealed that the canyon is almost as wide as Pariñas in the average, but the geologic texture looks different since the dry beds of the springs look with a hard pan with dry mud over it. The color is grey-white, and few low islands of rocks, stones and sand are scattered in the middle. The edges of the rivers are formed by conglomerate of big rocks sticked together by a clay like material. The level of the water is marked by a line of oil (Talara is the oil industry center of Perú) at aprox. 1 m height from the ground. The cliffs are as much as 150 m high and they are sometimes very steeped. The erosion shows verticals cracks and horizontal strata of different aspect but always in a reddish grey tone of color. Big areas of lime dust are along the edges of the riverbeds. The mesquite woodland grows here and it is as much dense as in Pariñas. Very noticeable, the fossils are abundant everywhere: they are marine invertebrates

C. Mariner
1970

Journal.

Aug 4. Fondo, 14 Kms N and 13 Kms E to Talara, Depto Piura Perú
(Pecten and other bivalves, Cirripedians, Sabellids, etc.)
I think they are either Cretaceous or Tertiary and that they have been carried from the east mountains by the water in the wet season.
The vegetation looks more conspicuous than in Pariñas. Most of the trees and bushes are mesquite but there are also some Parkinsonia and Capparis. All trees have fruits hanging.
In the sunny and warm morning several birds are flying and calling along the mesquite and the river's bed. Very noticeable is the absence of Mockingbirds and Vermillion Flycatchers, but some bands of parrots with reddish head and green body are very noisily flying very high over the trees. I have seen them to perch atop the trees and one of them at the very top. I never could approach more than 30 m to them. Very soon they flew to other place.
Cliff swallows are not very numerous, but their nests can still be seen in the cliff, although none are apparently occupied. Many hummingbirds come to eat nectar in the red flowers of the parasitic plant which grows in the mesquite trees
(See reference to Pariñas in this Journal)

C. Martínez
1970

Journal

Aug 4. Fondo. 14 Km N and 13 Km E to Talara, Depto Piura, Perú
I could shot one (#23) male while was suspended in the air eating in one flower. Red woopeckers are very common and very tammed. They stand human presence even when as close as 10 or 15 mt. of distance. Very agile and ~~[illegible]~~ gracious they go around the ~~[illegible]~~ branches even upside down with extreme movility helped by the bended and stiffed tail. Many times they were pecking the wood. One hollow of aprox 3 cm. of diameter was observed at 1.80 m high in one mesquite tree. Presumible was the nest of one woodpecker. At 6 P.M. a flock of ~~[illegible]~~ 16 red woodpeckers was taking the last sun bath atop of a tree. After 15 minutes of being playing around, they flew away. 2 Black vultures were seen also in their nest in the cliff at ~~[illegible]~~ 30 m. high. The nest is just an hollow in the grey rocks, and many areas of white excrement are deposited in the nearby rocks. When we approached to the Cliff from the hardpan of the river bed, they heavily flew away. Many finches (fringilos) and Flycatchers are flying around. Flycatchers are very

C Mautner
1970

Journal.

Aug. 4. Fondo. 14 Km N and 13 Km E to Talara, Depto Piura, Perú.
noticeable by their tendency to fly in couples (a ♂ and a ♀) and for staying perched atops of the branches. I shot 3 of them (one ♀ Vermillion Flycatcher CMNH #26; one unknown ♂ Elaenia, CMNH #27; and one cachudito or torito, CMNH #28). Also many "pamperitos" or "mineros" are running over the clear, sandpan and gravel of the bed's river. Very well camouflated they run very fast and fly little. Their posterior claw is very large as it is in many terrestrial passerines. I shot 2 [redacted], from which only one was an acceptable specimen for the collection (#24).

The nets give little succes: one little bat was caught by Dr. Koford. Besides a little flycatcher and a finch. Many depositions of excrement indicated the presence of fox (Dusicyon). The excrements have a high content of seeds and vegetal material of yellow color.

We stayed at the camp, stuffing birdspecimens till 6.30. Then came the dinner and then to write the journal

Aug 5 After the breakfast, again I was going to hunt at 8 A.M. The day is sunny, warm and very dry.
[redacted] [redacted]

C. Mantuéar
1970

Journal

Aug 5 Fondo, 14 ~~Km~~ N and 13 Km E of Talara, 100 ft. Dept Piura.
I could see some mockingbirds flying over the trees and perching here & there sometimes. They are not as noisy and conspicuous as ~~they~~ were in Pariñas. Red woodpeckers and flycatchers are very abundant. Is very frequent when we ear the hammer noise of the woodpeckers pecking in the trees. The flycatchers are at least of 2 kinds: one rather grey or olive color which fly in couples atop the trees. It does not come close to the ground as the Vermillion flycatcher does. Very fast in flight, I could shot only one (Specimen # 32). The "cachudito" or "torito" are also common, but they are even faster than the other flycatchers. They fly and call atop of the trees, close to the red flowers of the parasetic plants (see journal of Pariñas). The hummingbirds are also somewhat common around the red flowers. They are very easily identified by their noise and calls. Since they became very close to me I could shot 2 of them (Specimens # 29 and 30) when they perch in small twigs close to the ground. Sylviidae and Coerebidae are present but in small numbers. Sylviidae are very tamed and approached very much to me,

C. Martínez
1970

Journal

Aug 5 Tondo, 14 Km N and 13 Km E of Talara, 100 ft. Dept Piura.
so I could shot at least one (specimen #31) The Coerebidae are very restless and fly from one flower to the other very fast, and then in straight line to other ~~[illegible]~~ far and tall tree. Conspicuously missing are the grey finches and the parrots. I did not see or hessen any. Noticeable, the couple of black vultures seen the day before in their nest on the cliff's wall, were seeing today perching in a nearby mesquite tree. Also, as we approached, they flew away. At 10 AM my hunters finished and went back to take some fotographies and to stuff my birds. At 4PM, we desasembled the camps and left for Chiclayo.

Aug 5 Talara, Depto Piura
When we were driving along the road by the beach and fisherman's wharf, we could see how abundant were the black vultures there, & which go to eat in the garbage collected along the town (they approach to the women who go to throw away the can of garbage) and in the ~~[illegible]~~ sewer pipe which open to the beach. Sea ~~[illegible]~~ gulls fly also among them and also eat the garbage.

C. Martínez
1970

(Thursday)
Aug 6

Journal -

Lambaya-
1800 ft. que.

Rio Almos, Puente Guayabo, 10 mi E of Almos, Dpto

This habitat is very different from the two precedent ones. It is a spring of cristalline water, with reimy algae and some fishes and insects, surrounded by tall and steeped mountains of 250 m high (±). The steeped slopes are coverd with a seasonal deciduous forest of trees very straight and with branches only atop. (We are now in the dry season, so they look without leaves, but with many epiphytic Bromeliaceae. All the hills and trees look the same color of the ground; yellowish grey, because of the wind that moves the dust in the day habitat. Along the narrow spring (50 cm in the average) there is a terrain of grey yellowish ground, dusty and with some big rocks and numerous grey stones around. Some of the very porous and irregular rocks have crust like lichens of black and yellow orange color. Numerous nests of ant-lions larvae can be seen in the sand. The edges of the spring are rich in green vegetation. Mesquite, willow, castor beans, some Cereus cacti, big ones, and many other bushes and short herbs.

C. Martínez
1970

Journal

Aug. 6 (Th) Rio de Olmos, 1800 ft, 5 Km N and 20 E of Olmos, Dept. Lambayeque

In the bed of the river there is just a narrow spring of cristaline water with a bottom of slimy algae and with some fishes and insects. The river is surrounded by tall mountains being the closest no less than 250 m tall and very steeped. Their slopes are of a round dusty and grey & yellow in color. They are covered by a seasonal deciduous forest of straight trees with branches only at top. We are now in the dry season and they look nude, but many Bromeliaceae are living in their branches. The timberline is no define or sharp, but the trees seem not to go further up than 500 m. Along the narrow spring (50 cm in the average) there is a sandy and sometimes dusty ground with some big rocks and stones scattered along. Some of the very porous and irregular rocks are covered by orange and black lichens of crusty aspect. The bed of the river, now reduced to the narrow spring, is rich in green vegetation in which we can see a sequence of succession: short grass and herbs close to water, some (small willows)

C. Martinez
1970

Journal

Aug 6. Rio de Olmos, 1800 ft, 5 Km N and 20 km E of Olmos, Depto. Lambayeque
short bushes after 3 or 4 m far, and then, over the higher ground, bushes and trees, from which the most conspicuous are the mesquite, the willow, an many other species umbrella like hard to identify since this seems not to be a breeding season, and so there are no flowers. Some big arborescent cacti grow here and there, and over a big tree there is a long and narrow-leaves epiphytic cacti together with the bromeliads. I explored the river edges and I could identify several Ficus trees, plenty of leaves and with very complex roots. Some roots of these trees grow as strangled around the rocks and other trees. Also some ~~palm~~ cane trees, small ferns, Guayaba trees, "Chirimoya" tree, etc. Some trees have very ~~long~~ long, narrow and hanging fruits, also do some vines. Few trees, specially those placed somewhat far from the water have a rather succulent aspect (xerophytic). This already ~~very~~ rich and complex habitat must be really luxuriant during the wet season.

The animal life is as much varied as the

C. Martínez
1970

Journal

Aug 6 Río de Olmos, 1800 ft, 5 Km N and 20 km E of Olmos, Dept. Lambaye-1 km
vegetation. Among the insects we could see many ants, antlions (nest of larvae and 1 adult), dragon-flies, yellow and monarch butterflies and 1 black and white Heliconia. The termites have nests ~~atop the trees~~ in the trunks of some trees. One of these nests looks as ~~big~~ big as ~~1 m~~ 80 cm high and 40 wide. Its walls are ~~so~~ very irregular and porous. It is located 2 mt high. Other termites make galleries ~~tube~~ like over the rocks. These galleries cross each other giving the ~~aspect~~ rock the aspect of a mosaic. The tubular galeries are not wider than 2 cm and are made of sand grains sticked together with some sort of glue like substance. Accidentally I broken one of the galleries. The termites interrupted their way and the soldiers came to form lateral walls of protection while the workers could pass from one mouth to the other in the ~~go~~ gallery interrupted. The soldiers kept their position with the heads facing in the oposite direction of the gallery, while the workers sticked and sticked new wall material. In 3, ½ hours, the destroy section was rebuilt.

Small fishes (6 cm long in the average)

C. Martínez
1970

Journal

Aug 6. Río de Olmos, 1800 ft. 5 km N and 20 km E of Olmos, Dpto. Lambayeque
are swimming in small groups in the pools formed by the spring. They are specially abundant after small water falls which apparently oxigenate the water.

Since we had to camp and I had to stuff a bird left the day before, I did not have time to see the local birds more carefully but, Tanagers (red and yellow), Hummingbirds, Magpies (black and white), Mocking birds (Very similar to those in Pariñas, but smaller), Doves, Some Furnariidae which fly low along the river's bed), Orioles, etc.
At 2 P.M. we went to the town Chiclayo to shop and to leave Dr. Koford and we came back at 10 P.M. to sleep. While in the bed, it was ponible to see the small fire flies illeminating discontinuously here and there in the bushes.

Aug. 7. After the breakfast I went to hunt at 8 A.M. The day started somewhat overcast, but warm. Soon the sun came out and by 9 A.M. it was sunny. I went through the spring down. Many bird calls are listened, but few are close enough to shoot. Among the most conspicuous birds of this area are: The mockingbirds which are the same in color than those of Pariñas, but

C. Martínez
1970

Journal

Aug 7 Río de Olmos, 1800 ft 5 Km N and 20 Km E of Olmos, Dept. Lamba-yeque here they seem to be somewhat smaller. Quite numerous they fly in groups of 2, 3 or 4, and eventually they are alone. One male Vermillion Flycatcher was observed atop of small bushes and flying in rather small loops returning soon to perch to the same branch. Some brown Furnariidae, with clear belly and dark stripe on the eyes were alarmed when approached and flew away not very high (1 m and ½) but in straight line to the very dense and short bushes. It was impossible to follow in the thicket. Apparently they live there because I felt them to walk inside. Two doves were also seen flying away from one nearby bush to the high hill. They were violet-brown in color, with a tail white (open when flying). A big hawk, as big as the red-tailed hawk from Calif. was seen flying atop short trees along the creek. Very silent in flight, it perched for few minutes in a high branch. Its color is brown, with the tail clear and the head darker. When perched looked around for a while and then very silent flew away. In a rather dry Acacia type of short tree I listened birds flying and calling. Among them, Hummingbirds and Flycatchers. I approached to it and could shoot 1 Coerebidae, 2 little Flycatchers and 1 Hummingbird (Specimen

C. Martínez
1970

Journal

Aug. 7 Río de Olmos, 1800 ft. 5 Km N and 20 Km E of Olmos. Dept. Lambayeque (#34-35-36-37). When examining the tree I could discover that there were no flowers for these some of which are supposed to be nectar feeders, but there was lot of sap glue-like coming out from some scars of the tree. Also many ants and flies were around. They probably supplement the diet of the Hummingbird and of the Coerebidae which were pecking there. At 10 A.M. a flock of parots passed flying very high and calling loudly all the way. One little Parulidae which was eating on insects atop of a big mesquite was shot (Specimen # 33). It was pecking here and there in the cortex of the branches. Many other yellow breasted Parulidae were along among the leaves, but the flock soon left the tree and flew to another. Very restless birds, they seldom spent few minutes quiet. Other vertebrates seen close to the camps in the spring were small frogs, not bigger than 2.5 cm long, yellowish in color, singing in a cricket like fashion close to small pools. They are hard to see, and as soon as Jaymes died they stopped the singing. In some pools they were dueting. Some slow moving tadpoles were also in the quiet pools of the spring. I don't know wether they are the same species. At noon I went back ~~to the camp~~

C. Martinez
1970

Journal

Aug 7 Río de Olmos, 1800 ft. 5 Km N and 20 E of Olmos. Dept. Lambayeque to the camps and spent the whole afternoon stuffing the specimens.

Aug 8. I went to hunt at 11 AM again under a warm but ~~so~~ clouded day. In one ocasion I went 20 m up in the hill since a hammer noise was coming from that direction. I could approach, but unfortunately not at a shooting range of my gun, to a beautiful big and crested woodpecker (Lineated ?) which was pecking in one of the dry trunks. Flew away in few minutes. I went down to the creek again and among the bushes a could observe a giant Flycatcher, brown in color, with a dark stripe on the eyes. Perched atop one bush and stayed there for 3'. Flew in straight line to a very dense Ficus ~~[illegible]~~ when I approached. I stayed looking around close to a dense thicket in the middle of an small sandy island among 2 branches of the spring. A small, reda woodpecker came flying, perched in the thicket and I could obtain it as specimen (#39) At 11.40 AM, a flock of small blue and green parrots came flying and perched

C. Martínez
1970

Journal

Aug. 8 Río de Olmos, 1800 ft. 5 Km N and 20 Km E of Olmos. Dept. Lambayeque
atop the ~~tree~~ tree close to me. I shooted one which perched at the very top, but it did not fall down because of entangling in the branches. After 30 minutes I went with R.E. Jones, and with a long stick he recover it after climbing the tree. The little parrot was still alive but apparently shocked. We killed it by pressing the breast and went back to the camp. I stayed there stuffing specimens till 6 P.M., when I went to set the net to trap bats with R.E. Jones. When we were setting it, we caught the first Phyllostomatid (specimen # 41) on it. After 2 hours I went to check the net again, and another bat was trapped there (# 42). This was somewhat bigger than the small Phillostomatid and furiously bitted the net with the sharp teeth. The net placed from one side to the other of the spring close to the road and not in a ~~very dense~~ place with too dense vegetation showed to be very succesful. We remained stuffing specimens untill 10 PM, time to go to sleep again.

Aug 9. We awaked at 6.30 AM and after breakfast I continued repearing the bats. R.E. Jones came with another Phyllostomatid caught in the

C. Martínez
1970.

Journal

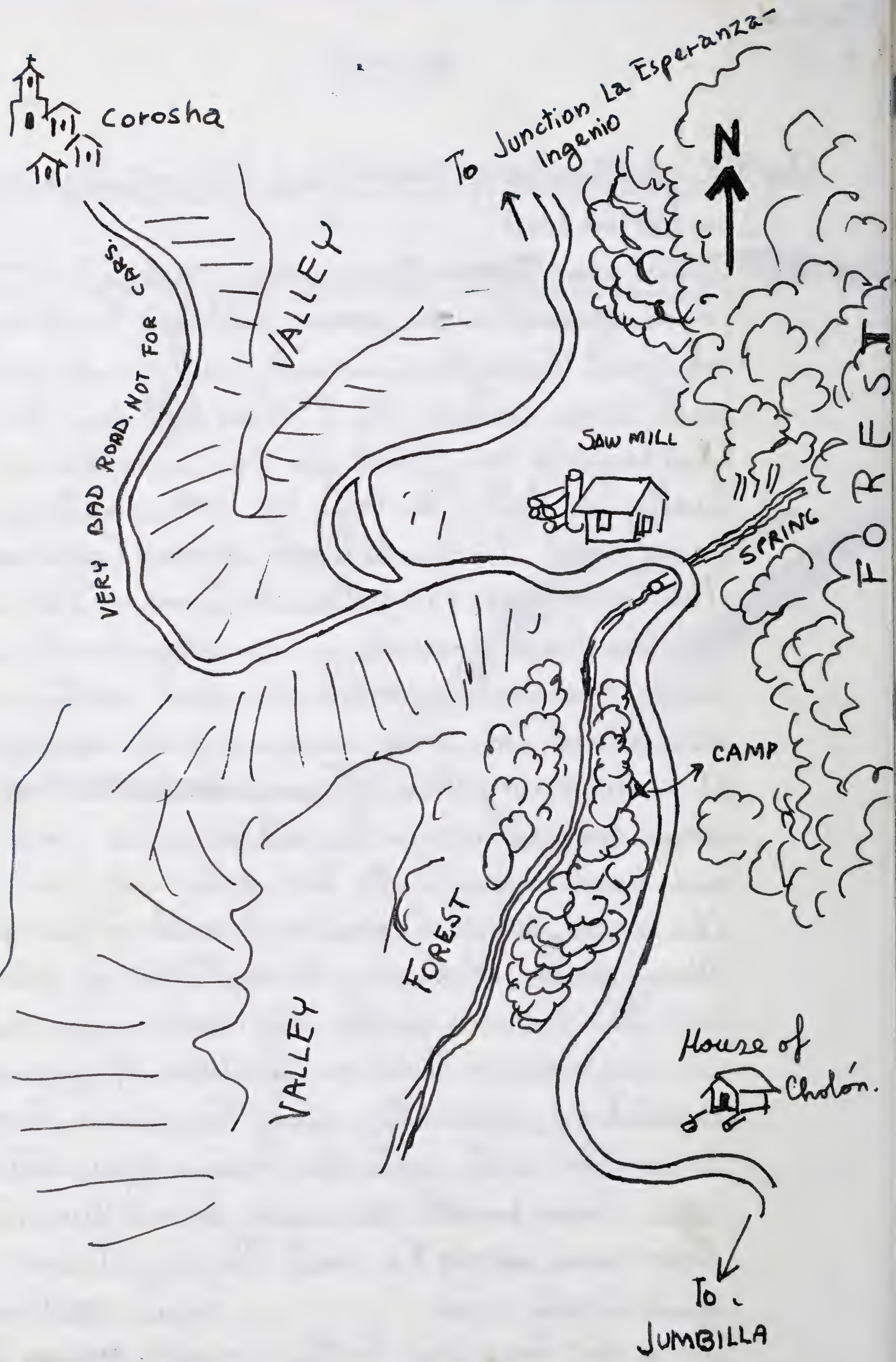
Aug. 9 Río de Olmos, 1800 ft. 5 km N and 20 km E of Olmos. Dept. Lambayeque
net. It was with its right wing broken and the body somewhat bigger than the Phyllostomatid ~~capturé~~ caught the day before. I stayed all day prepairing the specimens (#41-42-43). At 4 P.M. I went to explore the habitat and to take same photographs to the different plants of the Locality. I saw many lizards basking over the stones. Some of them looked somewhat long (25 cm. ±), clear in color and with a dorsal crest of long scales in the Iguana way. Their chin and throat are orange. Some other lizards are smaller and without the dorsal crest but with 2 longitudinal black stripes in the back. Among the other animals seen are the conspicuous Pepsis wasps (tarantula-hawk) flying over the bushes and herbs, and the yellow and Monarch butterflies. At 7.30 PM, after dinner, I went to check the net. Nothing has been caught yet. But I could catch one Cricket-frog in the pool of the spring. The color is olive with 2 dark longitudinal stripes from the nose, through the eyes to the back. The belly exhibit some white spots in the sides. The size is no more than 2 cm long (body length)
We went to bed early since we had to leave the next day for Lambayeque to repair the car and to lea-

C. Martínez
1970

Journal

Aug 9. Río de Olmos, 1800ft, 5Km N & 20Km E of Olmos. Dept. Lambayeque. we for the east.

Aug 11 ~~Aug 10~~. Desert near ~~Motupe~~ Morrope, 10 Km N Chiclayo, Dept. Lambayeque.
After repairing the car, process which took the all day (Aug 10) we spent the night at a country with sandy ground and some bushes. At 8.30 we left again for Chiclayo to buy food for the trip to the East. Finally we left Chiclayo by 10 AM and took the same road to Río de Olmos toward Cajamarca. The landscape is spectacular coming the Andes Patches of red ground are seen here and there, and mesquite woodlands and cacti are abundant in some canyons and springs. A criss cross system of* ~~ways indicate the clear~~ narrow ways in between the grasses and bushes indicate the action of goats, the main source of meat and milk of the natives. Many areas look very devastated of plants and the erosion creates big cracks and landslides. In Cajamarca there are patches of greener vegetation, specially along the rivers. Rice is together with corn, the main agriculture here. Some small banana farms have also been seen along the rout. The night was spent close to river in a woodland. In a big tree close to the camp, many bats


Corosha
To Junction La Esperanza-
Ingenio
N
VERY BAD ROAD. NOT FOR CARS.
VALLEY
SAW MILL
SPRING
FOREST
CAMP
FOREST
VALLEY
House of
Cholón.
To
JUMBILLA

C Matínez
1970.

Journal

Aug 11

and nighthawks were seen flying around. Calls ~~Aug 11 [illegible]~~ of owls were also listened in the night. At 7 AM. we left the camp and headed again for the East

Aug 12 3.5 road miles S.E. of Corosha 6900 ft. Dept. Amazonas

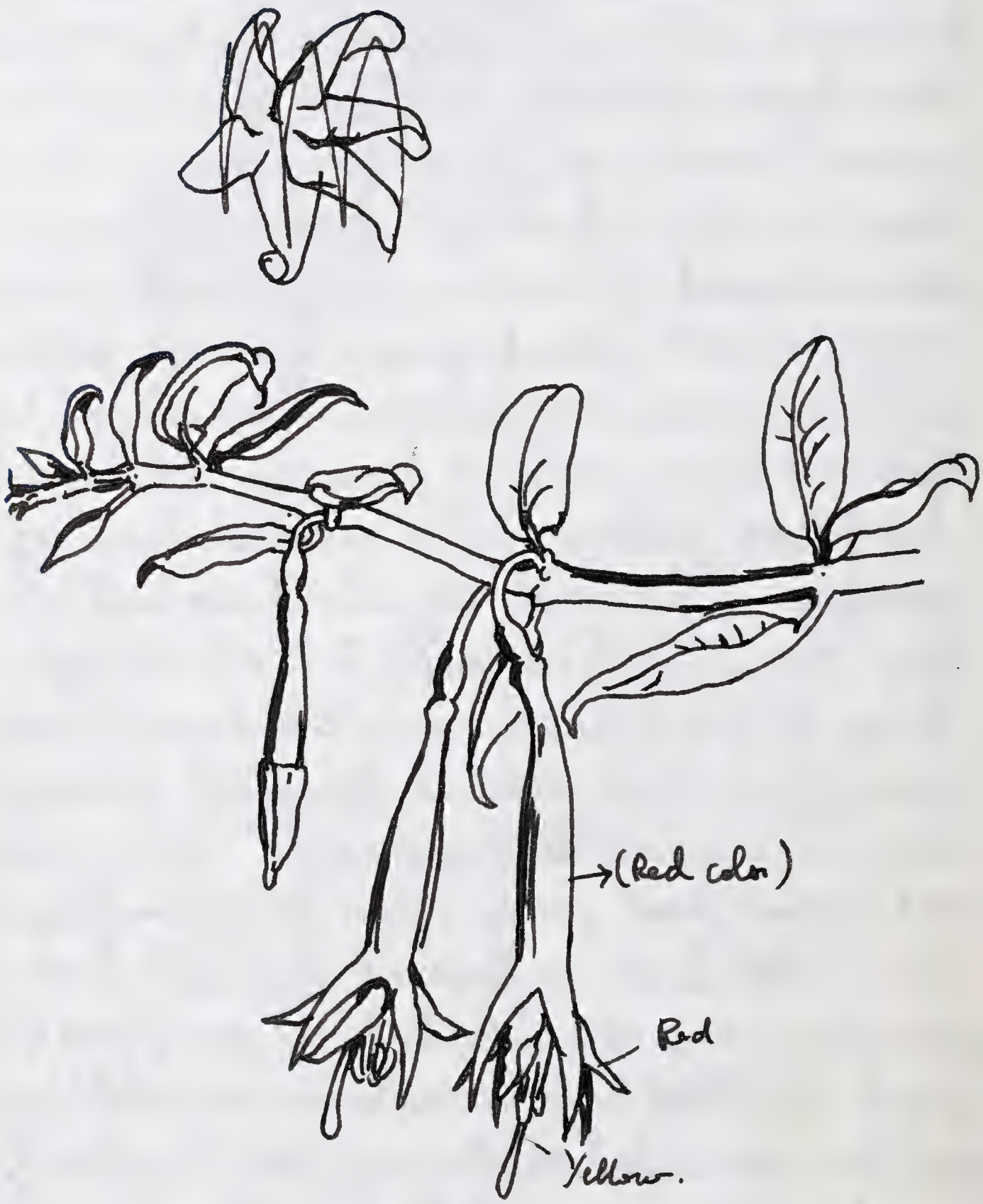
After coming a country with alternate aried areas and cactus forests, we arrived to the area of the cloud forest up in the mountains. Many areas have already been cleared for agriculture. Specially noticeable is the destruction of the forest around Florida (Pomacochas) which is the main town on the edge N of Lake Pomacochas. We went through the road until we were stopped at La Esperanza Military Post. Since we did not have permit to continue, we came back to the way to Corosha and camped in one edge of the road besides a forested area over a spring. The weather is hot when sunny and rather cold when clouded. The atmosphere seems dry, but in the very early morning is very wet, ~~[illegible]~~ and also when fog come across. The ground is yellowish and grey, but there are some patches of orange ground too. Few stones and small grey rocks are scattered around. The vegetation is very complex. It is a tropical cloud forest or tropical high mountain forest

Vine and its flowers from the clouded forest. Often visited by hummingbirds.
Depto Amazonas.

C. Martinez
1970

Journal

Aug 12 3.5 mi of road SE. of Corosha, 6900 ft. Dept. Amazonas.
Everywhere when it has been lumbered or just burned, it is replaced slowly by chaparral. In a typic spot, the forest is organized in several levels of leaves or canopy. The first level is 1 to 1.8 m high from the ground and it is composed of bushes, ferns and vines. Many small plants grow also in between, (Licopodiaceae, Bryophits, Begonias, etc). Some bushes have colorful flowers, either red, violet or yellow) The second level of canopy is formed by short but abundant trees or high bushes (2 to 3 or 4 mt high). Some of these trees have big leaves whose points are downward directed giving the tree an umbrella appearance. Many arborescent ferns and young trees form this level. The third level is formed by tall trees which are also very abundant. They are from 10 mt high to 35 mt high. Seem to be very old and they are the principal victims of the lumbering settlements. They are not thicker than 1 m neither their roots are as complex as in the lowland trees. Their branches support an impressive amount of epiphytes among which the Bromeliaceae are the most common. Bromeliads as big as 50 cm of diameter with red, green

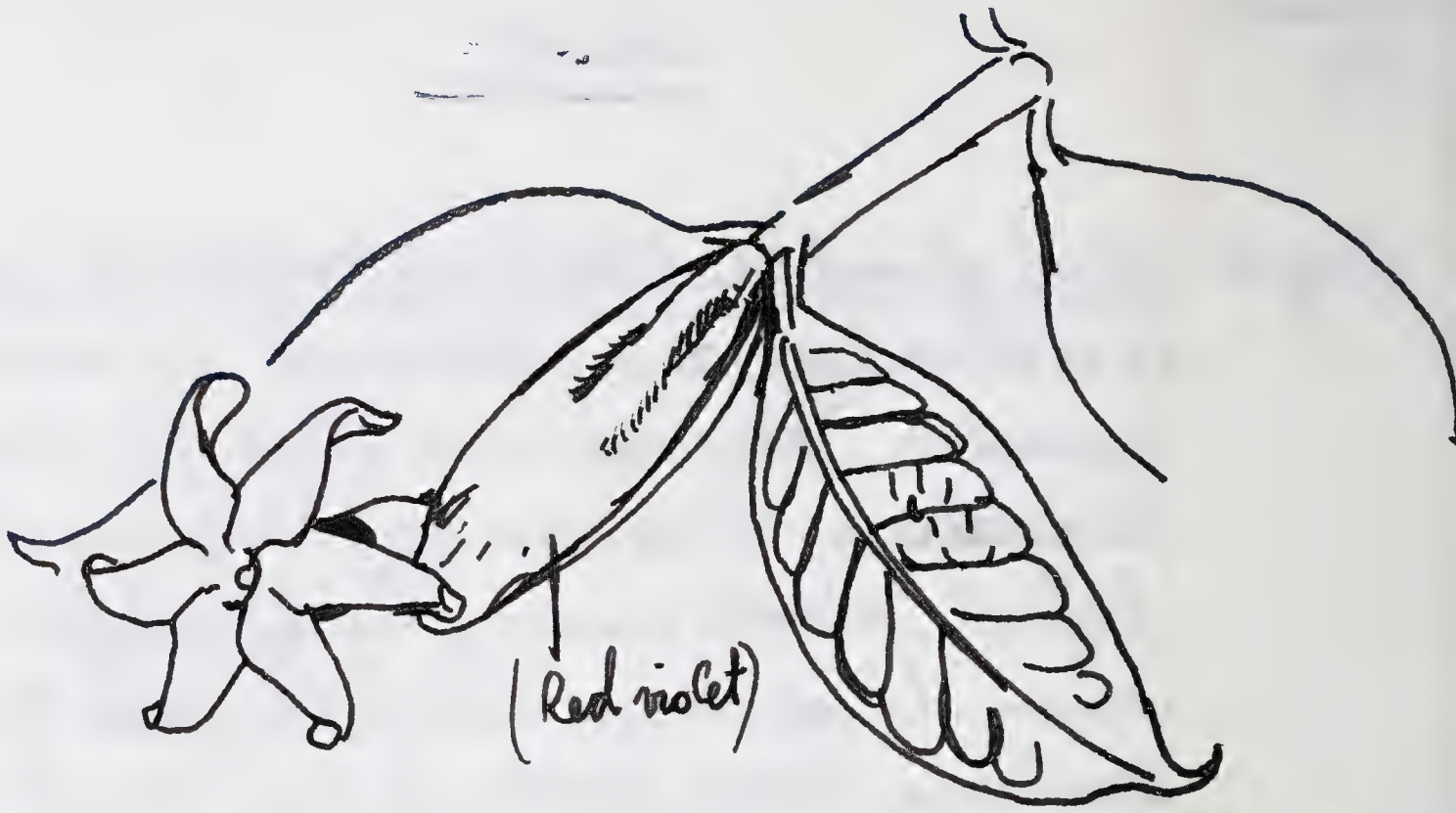


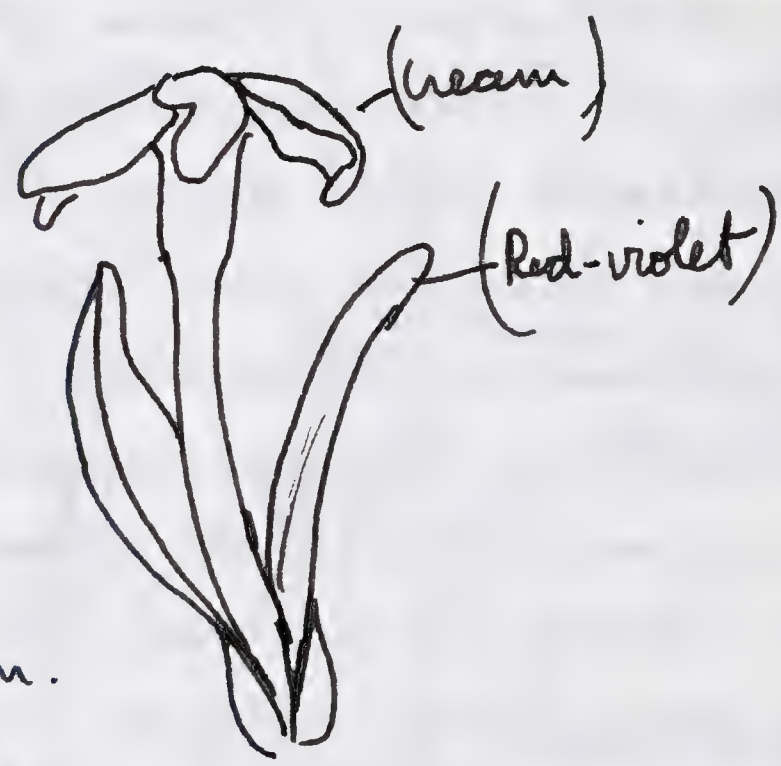
Fuesia visited by nectar eating bat and hummingbird. Depto. Amazonas.

C. Martínez
1970

Journal

Aug 12 3.5 mi of road S.E. of Corosha, 6900 Ft. Depto. Amazonas.
or dotted leaves are observed in most of the branches. There are also Orchids, Cacti ~~Aroideae~~ Araceae and many other unidentified plants among the epiphyts. Lichens, many of which are ramified, cover trunks and branches. Many kinds of vine conect the different canopies and some of them extend ups very straight. Their leaves are usually with their acuminate point downward directed. In some cases they are very narrow and long. ~~Bambus~~ Since this particular forest is located in hillsides and deep canyons, many times seems that the canopies are intermixed. Among the animal life, the insects are very numerous. I have seen hundreds of Heliconia and Heliconia like butterflies stepping and flying. They are specially attracted by the cow's urine and by the different flowers. Wasps of many colors fly all over, the same as flies and mosquitoes. Ants don't seem to be very numerous, but there are some female wasps which have lost the wings and which are very ant like. Coleopters are also very numerous either in the ground or in the bark of trees. Some of them are





1 cm.

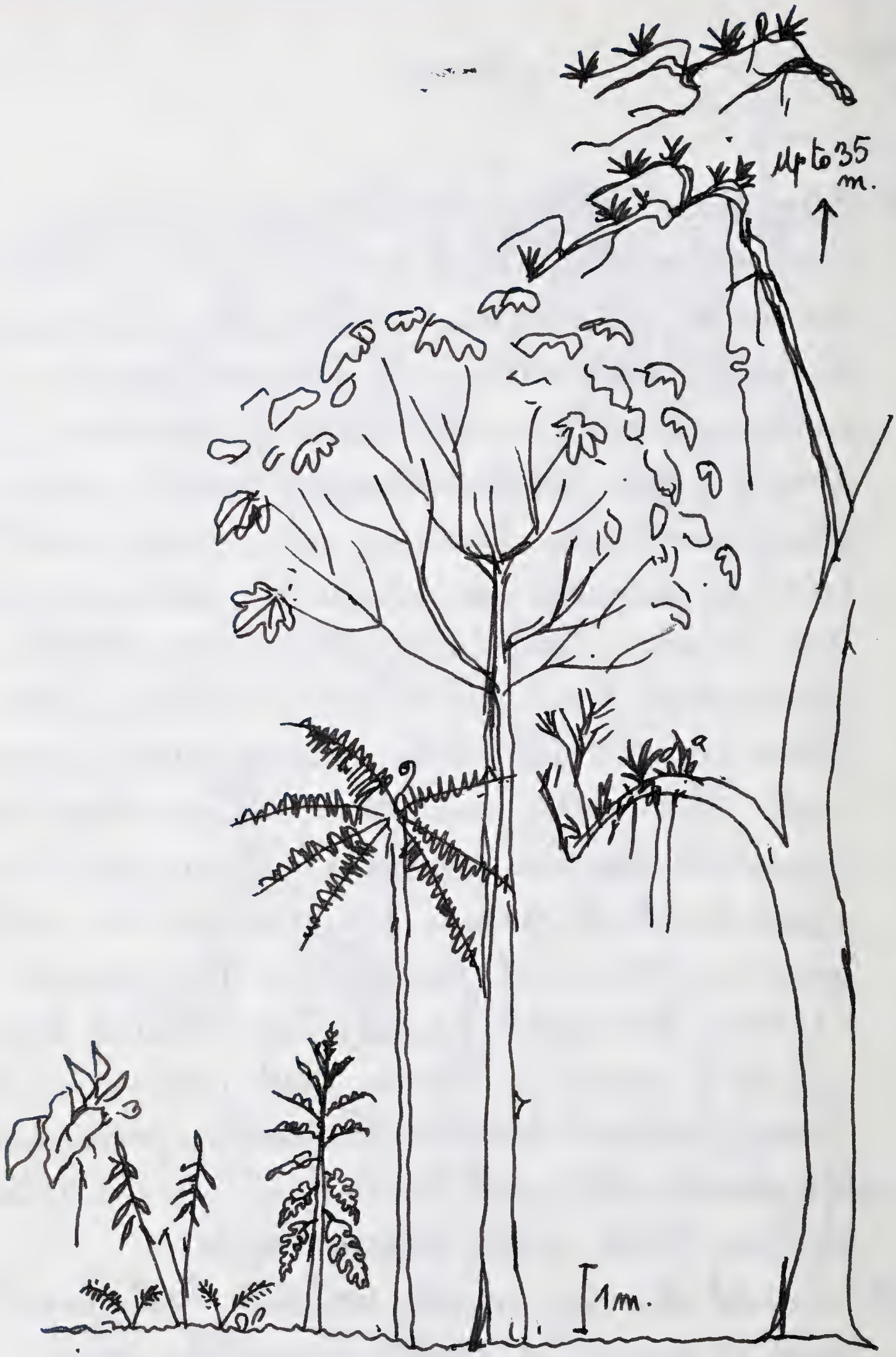
One of the vines of the cloud forest.
Flowers visited by the Hummingbirds
Depto. Amazonas.

C. Martínez
1970

Journal

Aug 12. 3.5 mi SE of Corosha; 6,900 ft. Depto Amazonas
brilliantly colored and small. The dung beetles are the bigest reaching 3.5 cm long and having a dark brown color. Spiders are also very conspicuous. Their webbs are seen in many places: among leaves, at the entiance of small cracks on the ground, etc. There are also some small borrows (≅ cm of diameter) in which the borrowing spiders are living. They are by 4cm long, black and somewhat hairy. They don't make a door in their caves. Not too many birds were observed this very first day. One big, brown squirell cookoo passed flying over the car and 2 green jays were seen calling over a tree not far from the camp.
When the night came, the habitat becomes full of sound. Many bird calls and also some more monotonous calls, presumably of insects. We went to bed at 10 P.M. after a long talk with some natives.

Aug 13. I spent this day mostly watching the different kinds of birds and insects around the forest. The most conspicuous seem to be the yellow-green jays. They stand up in the branches of the tallest trees and call and look around. Very noisy the seem to call the attention of the other birds of our presence. I heard



Different canopy levels at the clouded forest.

C. Martínez
1970

Journal

Aug 13. 3.5 mi SE of Corosha, 6900 ft., 6900 ft., Depto. Amazonas
there several times dueting from one branch to other tree. The doves are also numerous and their calls can also heen lisened in the forest. They seem to like the lower canopy better than the jays, although sometimes they perched up in the tallest trees too. It is hard to identify the other little birds which perch and call up in the branches. Flycatchers seem to be the easiest, since they tend to perch at the tips of branches. Hummingbirds chase each other and make their characteristic hummer noise. In two occasions I could see the blue and lone tailed hummingbird eating on the red fuchsias. It was at 2 P.M. and it was so fast that it was impossible to shoot it. I spent the rest of the afternoon preparing the specimens collected by Bob.

Aug 14. I tried hunting this morning from 7.30 A.M. to 11 A.M. Not too much luck in this day. The birds are too high in the trees and off the range of my gun (ammunition #38). After at least 30 min staring which I did not see anything close enough. I finally discover a spot where some trees had been ~~de~~ cut and so there was a space to recover the shooted specimens fallen from the high branches.

C. Martínez
1970

Journal

Aug 14 3.5 road miles SE of Coronha, 6900 ft, Depto. Amazonas
Only a tanager (Specimen #50) and a Flycatcher (#49) were collected in that way. The tanager was perching in a branch not further than 10 mt. from me. It was calling single and unconspicuous notes. The flycatcher was at the same distance but conspicuously singing. I shooted many other birds up in the branches, but they were ~~lost~~ not hurt and flew away. In the afternoon I ~~set preps~~ setted the mouse traps (12) in a side of the road and I preparated some specimens collected by R.E. Jones in the net. The net was set at 2 P.M. in a supposed to be a ~~bat~~ bird passway among the bushes. (specimens #51-52-53). Spent the evening in that preparation of specimens. Rain came during the night.

Aug 15. At 7 AM went to check the traps and many of them had been snaped by the rain. Only a small mouse, presumably house mouse, was caught (#55). Dr. Johnson came to the camp with 2 bats he collected in ~~t~~his net placed low among the bushes (# 56-57). With the help of R.F Jones, I ~~re~~set my net trap. The place choiced was in front of a big bush of fucsias to which the hummingbirds presumably will visit. After two hours, I could recover a Flycatcher like Parulid (specimen # 58) and

C. Martínez
1970.

Journal

Aug 15 3.5 mi of road SE of Coronha, 6900 ft. Depto. Amazonas one tanager (#54). Reset again the mouse traps and the rest of the afternoon was spent stuffing the collected specimens.

Aug 16. At 7 AM. a native approached to the camp with a dead "canchulo", vernacular name for the Didelphys of the zone. He told us that his dog caught the canchulo by the neck in the little lagoon close to the camps. We bought it for 15 soles. I spent the day preparing the skin and skull of the animal with the advise of R.E. Jones. Dr. Johnson brought me two of the bats he collected on his net, which also were prepared the same day. The mouse traps did not give anything.

Aug 17. Day spent mostly at the camps stuffing specimens collected in my net and one on R.E. Jones one. He told me that the nectar eating bat (#63) was collected close to the fuscia bush in the net

Aug 18. At 7.30 A.M. I went to try hunting again to the forest. A very frustrating morning, because I spent ammunition and no one bird was caught. I remained in the camps anyway after noon stuffing specimens caught in the nets. Also prepared one beautiful toucanet shot by R.E. Jones (specimen # 71).

C. Martínez
1970

Journal

3.5 road miles SE of Coroica, 6900 ft. Depto. Amazonas.

Aug 19. At 7 AM. went to try hunting. As soon as I was approaching to a bush in the dense forest I heard a ~~cal~~ bird call very much urrentit like coming loud from the bush branches. I tried to be silent and slowly approached. The bird call continued and I discover a small dark bird jumping among the branches of the core of the bush. It was no further than 3 mts. from me and became silent suddenly. Since I thought the bird could escape I shot, and it falled dead immedie tly. With surpise I discover that it was the same kind of passerine Dr. Johnson collected 2 days before. The size is by 12 cm long, the color is darke brown and black in the back, the wings are round and short, and the bill slender, weake and with a ~~rict~~ setaround around the nostrils. The plumage is fluffy. The legs are strong but the hallux claw is not too big. It may be a sort of Furnarid or a Rynochryplid (Tapaculo) (Specimen #75). I went further through the forest and I could listen a new call but diffent to that of the tapaculo. Suddenly, from the deep bushes, a quail like bird, chicken size came ~~from~~ to the trail. Gray in color, ~~tail~~ had a pointed and short tail. Stayed on

C. Martínez
1970

Journal

35 road miles SE of Corosha, 6900 ft, Depto. Amazonas.
the trail for a fraction of second, and flew away at a short distance from the ground to the dense bushes. Impossible to shoot it. I presumed it was a sort of Tinamou. I returned to the camp by noon and spent most of afternoon preparing the specimens collected in the hunting trip and in the net.

Aug 20 This is the last day in our camp. The first thing I did was to see the nets, in which I discover a wonderful Piculet, grey with red cap, dead ~~[illegible]~~ entangled. The first in our collection. The rest of the day was spent preparing some specimens, taking the nets out, photographing and writing notes. In summary, we stayed in the edge of the cloud forest for nine days. The weather impressed me as very mild, with hot days when sunny (most of the days) and cold nights, specially by 5 A.M. when it became really very cold. Eventually it rained in the evening or in the night, but we never had heavy rain for more than 30 minutes.

C. Martínez
1970

Journal

Wooded valley at 3000 ft. 5 mi SSE Jaén, Depto. Cajamarca.

21. Aug~~ust~~ We arrived to this valley at 7PM. Dr. Johnson received the adevise to come to this place supposed to be rich in the owl Otus. The place corresponds to a woodland with ~~scat~~ abundant chaparral. This seems to be the dry season since most of the creeks we crossed are dry. The chaparral is not very green, neither the trees and lots of dry logs and branches are scattered in the ground. Since it is already dark, we set the camps and went to sleep. Ned. K. Johnson went to hear the owl calls by 9.30 PM, and had the chance to ~~shot~~ one specimen (Catalogue N.K. Johnson # 3109). In the midnight there was a rain which forced us to set the tent. These are really hot nights any way.

Aug 22. Early in the morning Ned went to hunt while I stayed with Bob at the camps. The weather is hot and somewhat humid. A short exploration made me familiar with this habitat. Some of the bushes which form the chaparral are as tall as 3 m. high and many are thorny. The trees are mesquite type but there are also several fat bottle trees, with very thorny bark. These trees reach about 5 m. high. Epiphytes grow on the branches, but they are not as numerous neither as

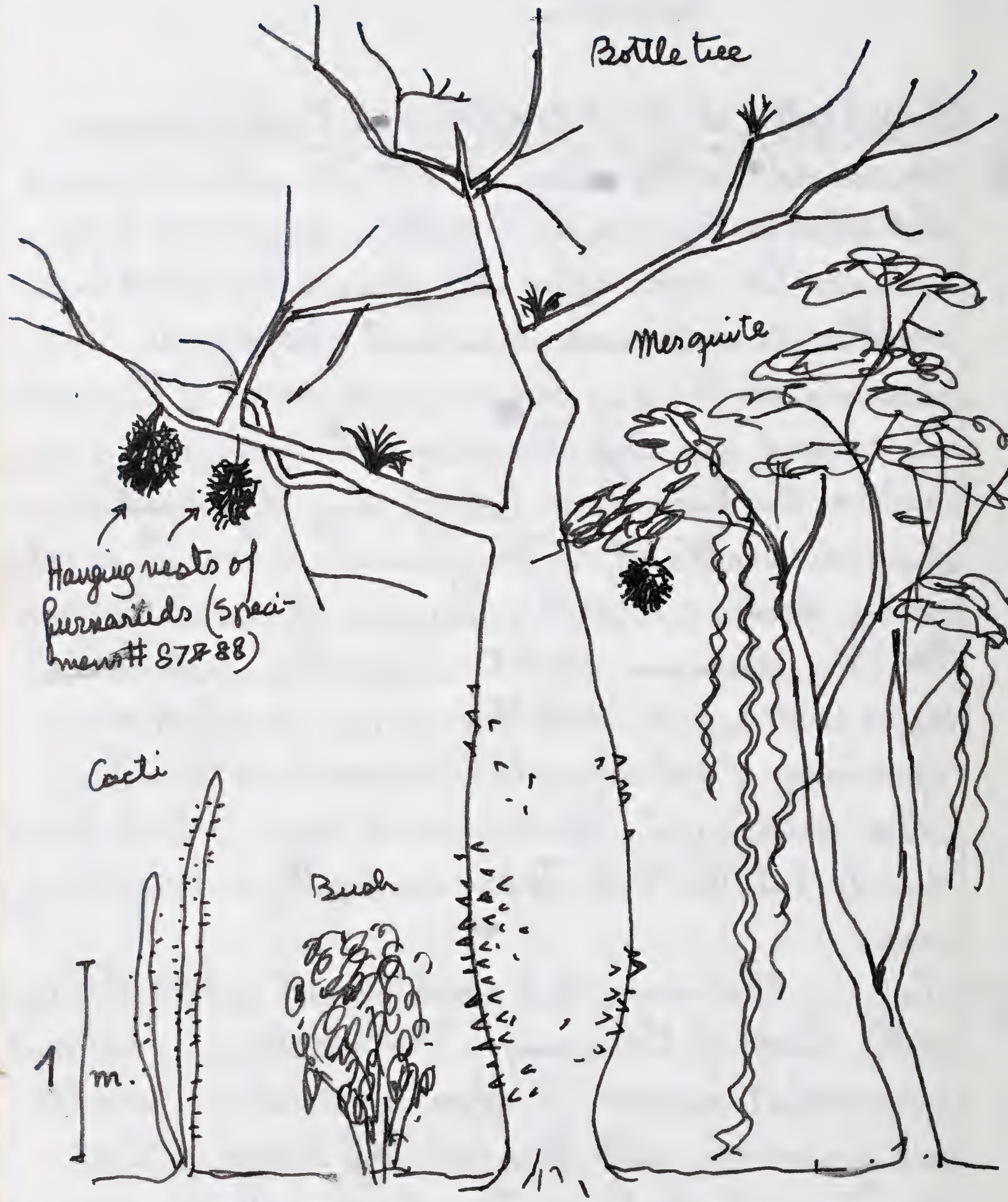


Diagram of the vegetation in Valley close to Jaén

C. Martinez
1970

Journal.

5 mi SSE of Jaén, 3000 ft., Depto. Cajamarca.

Aug. 22 as heterogeneous as in the clouded forest. I have been able to identify only bromeliads. Some are flowering and beautiful pink blossoms can be seen in the high branches. Vines and lianas are also abundant but quite dry in comparison with the clowd forest. The hills around the valley look wooded too, but the trees seem to be more scarce, specially in the north facing slope. Some cacti are also present, specially Cereus (?) long and no more than 7cm thick. The dusty ground is dry after the rain and many insects can be seen around. Conspicuous are the miner ants with their big mounds of ground (as big as 50cm of diameter), the long and compact columns of leaf cutter ants and the wonderful blue & black butterflies (Morpho?). Other arthropods are very abundant and also very nasty such as biting flears, ticks, flies, bees, moths, etc.; ck. Reptiles are also abundant and very active. I have seen running fast among the bushes several blue tailed lizards (about 20cm long) very similar to skinks, plain lizards, orange throated lizards, and big iguanas (about 50cm long). Birds are also abundant and different from those in the clouded forest.

C. Martínez
1970

Journal.

5 mi SSE of Jaén, 3000 ft., Depto. Cajamarca

Aug 22. Squirell cuckoos, Anis cuckoos and green jays are among the largest. Specially the anis and the jays fly in small flocks and they are very noisy. Little furnarids (specimens # 87 and 88) live in larger flocks and they have already made big hanging stick nests on the mesquite trees. Very noisy, they give very loud alarm calls when threatened by the hunter. Flycatchers, doves and finches are also among the other conspicuous birds of the area. Curiously, I haven't seen any hummingbird. Ned and Bob say they have seen some (see their notes). I went to hunt for a while in the afternoon and spent afternoon and evening stuffing specimens.

In the night, at 7.30 or 8 PM, Ned could hear the calls of the owls.

Aug. 23. The day is hot and seeming. I went hunting by 7.30 AM up to the west where the valley ends in mountains and where the natives told me I could find fresh water. After coming a fence I entered a much fresher area and the dry springs are now full of water. Close to the water there is a field of cultivated papayas and corn and I went there trying to get close to a bird which was calling much like an Icterid. I could not see it, but I could

C. Mautner
1970.

Journal.

5 mi SSE of Jaén, 3000 ft., Depto. Cajamarca

Aug 23. see the body and tail of a sort of mustelid at least 1.5 m long, hairy and black with short legs. It may have been some sort of skunk. Impossible to shoot him. Down to the spring I could see there many dragon flies (red and grey) flying around and other aquatic insects. Also many little frogs are jumping and swiming around and several tadpoles are in the water. Multi-colored butterflies are all over, and also army ants in compact files carrying pieces of insects and plants. Curious is the courtship display of the red dragon fly: while the male stands flying in almost one point in the air close to the water, the pale female makes quick movements and touch the water with the legs and abdomen. She moves quickly over the water and is followed by the male which also try to chase other intruder males. Around this place rich in insects and ants I have seen the antshrikes flying around but not trying to catch insects. After stuffing specimens in the afternoon, I went with Ned to attemp night hunting at 7 P.M. The Otus owls are already calling and sound like: Prrrrrrrrr!. and not very

C. Martínez
1970

Journal.

5 mi SSE of Jaén, 3000 ft., Depto. Cajamarca

Aug 23 loved. Also the little pigmy owl (Chuncho) is calling and many birds seem to be quite frightened when lissening. It was impossible to hunt any Otus, but we could lissend them dueting, barking and we also could see a Caprimulgid. The eyes of this animal are really brillian during the night. Specially when illuminated with the flash light. During the night, the bushes moved rather heavily, perhaps because of ~~#~~ some venado (deer). ~~of the~~

Aug 24. Day of breaking the camp. Day overcast. Clouded and somewhat rainy, but very hot anyway. Flocks of parrots was flying very high in the sky. They are always ~~#~~ calling loudly ~~and~~ when flying and are in formations of pairs, males and females according to Ned. The flocks are of about 25 animals

2.5 mi S Pto. Tamborapa, 2000 ft., Depto. Cajamarca

Aug 25. We arrived to this point about 11 AM and set the camps. The place is in the East side of the road, no more than 100 m. from the cow corral. The habitat correspond to a forest drier than that south to Jaen, since the cacti are more abundant, there are less epiphytes and the mesquite

C. Matuier
1970

Journal

25 mi. S Pto Tamborapa, 2000 ft., Depto. Cajamarca.
Aug 25 trees are very abundant. A creek runs West to
over ~~cap~~ camp. Its water seems to be quite
hard since it takes work to produce soaps
foam. The edges don't have canes or low
bushes like in other creeks seen ~~in~~ close
to Jaén, but the trees get very close to the
water forming a sort of gallery around the
bed. Lots of leaf litter accumulate in the
ground and few short herbs grow here and
there. Along the road there are some cha
parral of succesion. The hills which surround
the narrow valley have also a mesquite
type of vegetation which looks rather drier
than in the valley. Few bottle trees
can be seen arround and most of the
epiphytes seem Cactaceae to me.
The fauna is varied and interesting. Arthro
pods are dominant specially mosquitoes,
bees, wasps of several sizes (from a fruit
fly to a big spider hawk), leaf cutter ants,
fewer butterflies than close to Jaén, giant
Scolopendrae, many spiders and hords of
ticks. The leaf cutter ants live in subterranean
holes from which their pathways diverge.
I have seen many workers running busy
carrying flowers ~~of~~ or pieces of leaves. The

C Montúfar
1970

Journal

Aug 25 2.5 mi. S Pto. Tamborapa, 2000 ft., Depto. Cajamarca
big headed soldiers are also around but without carrying anything. The ticks are of several kind: the largest are of around 1/2 cm long and not very common, the medium size are around of 3 mm long, and the smallest are almost 1 mm long. These are the most nasty and common parasites we found.
The termites are making big nests suspended in the trees (they are about 50 cm of diameter the largest) to which the many tunnels of cellulose converge. The brown wasps make their hanging cellulose nest sometimes not far, and in one occasion over the termites houre.
Among the birds I could see the beautiful forest falcon (Micrastur) perching not very high but in a very visible branch in a tree. He was looking around and he permanently ~~move~~ turned the head in several directions. Did not fly away during all the moment we passed not far than 30 mts. in our car. Anis cuckoos are also abundant and flocks of 6 or 8 are usually in the trees around our camp or around the cattle. Squirrell cuckoos were also seen and I shot one (#96) in the bushes. They soar very elegantly with

C. Maluier
1970

Journal

2.5 mi. S Pto. Tamborapa, 2000 ft., Depto. Cajamarca.

Aug 25 the help of their tail. Finches, Flycatchers, Big woodpeckers and green jays are among the other resident birds seen around.
The day has been very hot and humid, but the rain of the night gave some freshness. Not everybody had a good night. Ned was attacked by hundreds of tiny ticks when he was hunting among the corral cacti and did not get rid of the arthropods. Bob and I were also bited by ticks during the night.

Aug 26. In the morning we still have our skin hurted by the ticks bites but we prepared anyway our hunting trip. The same furnariids found close to Jaen in the hanging nests were also forming flocks here. They give the same chip! chip! chip! call, and a loud chorus starts when they feel threatened. I also could learn to identify the call of the beautiful Tody flycatcher, which sounds like a musical zipper.
In the dark night, after preparation of the specimens caught during the day, I tried night hunting along the road. Soon my flashlight reflected the very big eyes of a Caprimulgid sitting on the ground.

C. Martínez
1970

Journal

2.5 mi. S Pto. Tamborapa, 2000 ft., Depto. Cajamarca

Aug 26. Apparently he was very confident on his camouflage coloration since he did not make any attempt to move for more than a minute. A good shot and a good specimen. I left it for the next day to be prepeared. Ted went also to try to hunt any Otus, but in spite he lisened many calls, he could not get any specimen.

Aug 27. After another lousy night of ticks bites, we decided to break camp in the afternoon. I went hunting for a while in the morning and got a Tody flycatcher. These are really cute birds of small size which move very quickly on the branches. They do not expose as much as the other flycatchers but I got the specimen (# 103). The bill is very wide and long and gives the spatulate appearance. I lisened the call of the forest falcon too, but I did not see it. At 10 A.M. came back to the camps and stated prepearing the Tody flycatcher and the caprimulgid. This last one was hard to prepeare, specially because the feathers were very loose. The ~~coop~~ stomach content showed a big amount of bettles half broken. No other food material

2300 ft.

C. Martínez
1970

Journal

Aug 27. 2.5 mi. S Pto. Tamborapa, 2000 ft., Depto. Cajamarca was seen in the interior. After we prepared the specimens, I wrote my notes, took the pictures and got ready to break the camp.

Aug. 28. 5 mi S to Pto. Tamborapa, 2300 ft., Depto. Cajamarca
This habitat were we camped is a low chaparral with few scattered trees. It is atop of a low plateau and the beautiful mountains sorround the place giving an impressive view. The weather is hot, sunny and the sky is transparent. Many of the bushes are mesquite with thorns. They are full of seeds. The trees are Capparis and not very tall (6 mts ±). The bushes form an uniform layer of vegetation not higher than 50 cm from the ground in the average. The soil is formed by very dark ground, not grey brown as in the other habitats of Cajamarca. At 7 AM many passerines are flying over the bushes: The always present furnariids (#87 & 88) and their hanging nests. They are not very good fliers like in the Jaen habitat and alway give short flies among the dense bushes. Their chip! chip! sound is lessend often and also their chourses. The vermilion flycatcher is also very abundant and ~~it~~ it shows

C. Martínez
1970

Journal

5 mi S to Pto. Tamborapa, 2300 ft., Depto. Cajamarca.

Aug. 28 himself very often stop bushes. Fringilids are also abundant and I could catch one (#) The look black headed and fly in small flocks of 4 to 6. Pigeons pass flying around and one striped skunk was seen croning the road. After Ned & Bob came with the specimens they shot, we left (about 1 P.M.) for the former place close to Pto. Tamborapa to stuff the specimens.

Aug 29 10 Km WSW Bagua Chica, 1700 ft., Depto. Amazonas

We got this place about 5 P.M. We camped about a 1/4 of mile from the main road. The habitat correspond to a mesquite-cacti woodland. The ground is a fine dust, very dry, gray in color. The vegetation is quite complex. Big "algarro-bo" are very common and also big cacti candelabre like. These cacti are thick (20 cm diameter) and very tall (about 6 m tall). Cap-paris trees are also very common and they are flowering. The bush vehicle is in between the trees is formed by Cereus, Opuntia and other succulent plants. There are also vines and epiphytes (cacti and little bromeliads) though not as abundant as in Rio Olmos or Corosha. The animal life is also very abundant. Among the

C Martinez
1970

Journal

10 Km WSW Bagua Chica, 1700 ft. Depto. Amazonas

Aug 29 Arthropods, the spider hawks and the big millipeds are the most abundant. These last animals are found under the rocks and trunks and they are of all sizes: from less than 4 cm. long to almos 12 cm long. They are red in color with black bands. Spiders are also very common. The webs extended among the bushes show sometimes beautiful specimens in their center. Their bizarre abdomen, with many dark diavities and thorns may have some attractive meaning to other arthropods. In the ground there are thousands of small spiders which come out from the cracks of the terrain. Their eyes bright as minute lights when illuminated with a flash light during the night. The birds are also abundant, specially the flycatchers (several species) and the allways present furnariids of the hanging nest (specimens # 87&88). They don't seem to be in the breeding season, but the nests are ~~the~~ centers of social activity anyway. They give the same call chip! chip! chip! and the loud laugh like chows when apparently fraightened.

There are also noisy flocks of cactus wrens,

C. Matuéz
1970

Journal

10 Km WSW Barra Clica, 1700 ft., Dept. Amazonas

Aug 29 and also smaller groups of green jays. Few hummingbirds are flying around. This day we captured a big lizard and a toad (Bufo) which were hidden in a trunk. We got them out with the help of fire and smoke (Specimens # 109 & 110). We went to bed early after a short and for me frustrating night hunting. The road close to the camp was full of Otus calls. Some of them very close. I could not see any neither to shoot. Dr Johnson was more fortunate and got 2 males. This owls has two kind of calls: one is Prrrrrr! and is the most common. The other sound is called the bark, sounds like a laugh and is given less frequently.

Aug 30 I went hunting at 7.30 A.M. Flycatchers and Coerebas are ~~Lizzy~~ very common. Also are the hummingbirds. I could get them (specimens # 111, 112, 113, 114, 115 and 116). I saw also a group of green jays (506) giving their typic calls and at least one of them was giving up and down movements with the body over a branch. The meaning of that movement is a unknown display. In the afternoon ~~at~~ I set the 30 feet

C. Matuéz
1970

Journal

10 Km WSW Bagua Chica, 1700 ft., Depto. Amazonas.

Aug 30 net among the bushes in which I heard the Otus call last night. When checked in the night I discover a brown nectar eating bat and a Hummer entangled there. I was tired, so in spite of the hot night, were left & to be prepared next day.

Aug 31 I went hunting again early in the morning. The day is sunny and hot. Flycatchers, Coerebas and cactus wrens are the common habitués, together with the Furnariids. Again I saw the green jays performing their calls and ups and down movements in one tree. This time they were associated with a small hawk which apparently lives among their community. They seem to tolerate each other very well. My net was not with specimens this morning, but in the afternoon there were a ground dove and a hummingbird caught (Specimes #122-123). After I finished with my specimes I took a bath in the nearby spring and in the night went with Ned to record the Owls Otus. In spite they were not too numerous or too close, ~~we are~~ he made good recordings of the calls and barks. No one was caught that night;

C. Mattiner
1970

Journal.

Sept. 21 (W) Rio Huahuasa Reserva Aguarona, 12 road mi. SSW Nazareth, 1100 ft., Depto. Amazonas.

We got our permit to continue at the military campament in El Milagro, few miles before Bagua Clica by noon. After to buy gasoline and food supply in that town we continued toward the lowlands in the North. The road went along river Marañón and after 30 km (±) from Bagua Clica, the cactus woodland changed to tropical rain forest of montane type. The slopes of the hills around the road are very stepped and probably it is very hard to collect there. We got Nazareth, the end of the road, by 4.30 PM. In the way we could see an Agutí like rodent crossing the road. It was impossible to locate it when closer. The day was at the first cloudy and in some places of the mountain there was some rain. Close to Nazareth the day was sunny and hot and humid, but the landscape very beautiful. Nazareth is a very small town close to the bridge, still not finished, which will cross the river Chiriaco, just few miles before it unites the Marañon

C. Martínez
1970

Journal

Sept 1 12 road mi SSW Nazareth, 1100 ft., Dpto. Amazonas
Since not a place available for hunting and camping was seen close to Nazareth, we came back and took a car trail to the east to a sandy beach in the western edge of river Huahuasa. This river is no more than 50 m. wide, not dipper than 50 or 60 cm and very fast. In the eastern side the forest seems to be less damaged by the cattle and agriculture, and we think in the possibility to hunt there. After setting our camp and having dinner, we admired the wonderful tropical night, and went to bed.

Sept 2. This was my camp day while Bob and Ned went hunting. Bob crossed the river to hunt there and Ned remained in the nearby thicket. Soon before noon, Bob came to the camp with 2 natives: the younger was Jerónimo and ~~so~~ the older (was his stepfather. Jerónimo is 17 years old, about mi size, dark complexion, strait hair and almond like eyes. His stepfather is about 40, dresses ~~as~~ with short pants and wears

C. Martínez
1970

Journal

Sept 2. 12 road mi SSW Nazareth, 1100 ft. Depto Amazonas, yellow feathers in the ears. He does not speak spanish. Jerónimo is fluent in spanish and his native language, ~~dos~~ He also desses as western. Very good hunter, Jerónimo was shooting and retrieving some specimens for Bob. It is hard to collect birds in a forest like this so the help of this people is very useful. By noon I went with Jerónimo and Bob and the stepfather to set one net in the ~~old~~ eastern side of the river. I went also with Jerónimo hunting in the forest. This habitat is fantastic. The ground is not red as would be aspected in a tropical rain forest, but grey. Many pools and swamps are along the indian trail. The stratification of the flora is more or less like in Cordoba, but there is much more variation and not so many bromeliads as epiphytes. There are though more Ficus like trees, with giant roots. There are also strangled rooted trees, Palm trees, big Musaceas (Banana like plants with red and yellow flowers), many

C. Matéucr
1970

Journal

Sept 2 12 road mi SSW Nazareth, 1100 ft., Depto. Amazonas
Aracas with giant leaves, and a fabulous amount of vines and lianas. In some of the pools there were small cocodyles. Jerónimo has the habilily of a good hunter and ~~recover~~ shooted and recover several birds for me. He also took me to the house of one of his friend and family auto to his own house. The houses were without walls, but only poles to support a palm weaved roof, which according to the natives is waterproof against rain. They gave me a cup of chicha a sort of beverage alcoholic made ~~of~~ with yucca roots. It tasted to me as sour, but not too bad. They live with very simple things, some of which are very curious and very well done (cups, ~~baskets~~) and they live on rice, banana, yucca, chicken and some wild birds. Something very impresive is the fact that they preserve good teeth in a country where they are lost at a very early age (by 20's). Though the catolicism and other western things have already been infiltrated, they keep pure many habits like the tatoos, foods and housing.

C. Martínez
1970

Journal

Sept 2 12 road mi. SSW Nazareth, 1100 ft., Depto. Amazonas
In the afternoon, by 3.30 P.M. we were visited by a ~~to~~ young schoolteacher, his students and the chief of the natives. The schoolteacher is also a native from the place, but he wears shoes and looks neater. He informs me the the natives are the Aguaruneo, and that the eastern side of the river Huahuase is their Reservation. Very friendly people, they asked for mouse traps, which we gave some, and they offer their services as hunters. Med asked for toucans and woodpeckers. I asked for mice.
In the night we set the nets and many bats came attayed. (specimens # 127 to 131) They are all fruit eaters since the stomach content revealed just banana semi digested. After this very interesting day, we went to bed by 9 P.M.

Sept 3. At 7 AM. I went to hunt with Jerónimo. He took me to the eastern side, the land of the Aguarones, through very narrow trails. As far as we were going away from the cultivated parts, ~~to~~ the forest seemed ~~so~~ less and less disturbed and many interesting things were observed. The land

C. Martinez
1970

Journal

Sept 3 12 road mi SSW Naranditi, 1100 ft, Dpto Amazonas
is in general very hilly and muddy in such a way that shoes were useless and I had to continue barefeet. There were no thorns so I was not so unconfortable, but at the end of almost 3 hours of walking became tired to death and my feet almost destroyed by the bites of little terrible flies. Many kinds of insect move under the canopy: Ants are perhaps the most numerous. The legions of leaf cutters are crossing the trail in many points, and also do the army ants. There are also giant and solitary ants of almost 3½ cm long. ~~Ca~~ Termite nests are very numerous and some of them almost half a cubic meter of volume. The landscape has endless beauty. Small springs cross the trails and the plants with a dark and sometimes brilliant green or red give the place an exotic charm. I saw a big snake crossing the trail. It was almost 1½ mt. long and green in color. Jerónimo told me it was a boa. In this occasion I did not carry half loads, so we ~~al~~ only fixed

C. Martínez
1970

Journal

Sept 3. 12 road mi SSW Nazareth, 1100 ft., Dpto. Amazonas

our attention on the closest birds: the inhabitants of the lower canopy and ground. Flocks of spinetail furnariids pass flying and making noise among the bushes; we got one of them (#136). Formicarids are also frequent and they easily came when Jerónimo imitated their calls. (#135-137). One hummingbird (#134) and one green manakin (#132) which were perching quietly on the bushes, were also caught. The last birds shot were a Tanager (#138) and other formicarid (prepared by R.E. Jones) also seen in the low bushes. Jerónimo gave me also one marsupial he had caught himself with the hands alive. when the animal was climbing a banana tree ~~[illegible]~~ (Specimen #133). He also showed the small cemetery where grandparents, relatives and friends have been buried. The place was an opening among the trees of small plateau. Not larger than 400 m², it had a cross in the middle and a big cane like a pipe. inclined

C. Martinez
1970

Journal

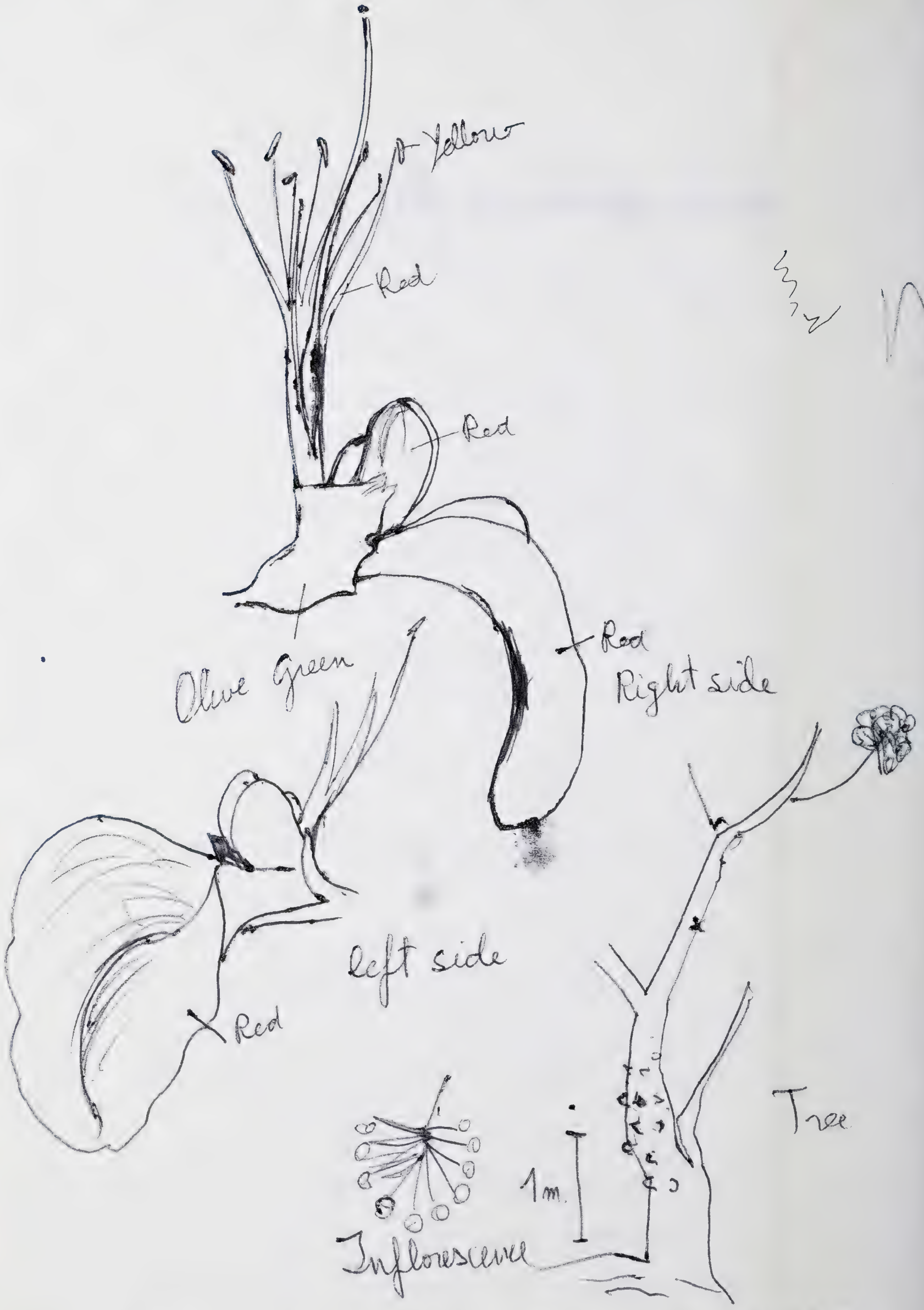
Sept 3 12 road miles SSW Maraeth, 1100 ft., Dept Amazonas
about 45°.
afternoon I started skining my birds till
night.

Sept 4 It was my camp day and I skinned the
toucan (# 139) brought by a native plus
some other birds collected the day before
(#140 and 141). This last specimen, a finch
(#141) was brought killed by the chief of
the aguarunas with a zarbatana ("blow-
gun"). In the afternoon I prepared the
specimens brought by R. E. Jones). Some
rain came by 3 PM

Sept 5 A good collection of fruguivorous bats
was gotten at the nets. The stomach content
was always fruit (banana). A short hunting
trip a I made in the morning revealed
to me the different behavior of different
birds. The formicarids (#152 and in R.E
Jones catalog #) are rather poor fliyers
and expose themselves easily when I
wissel. They live among bushes and
low trees. A couple of fly catchers (#
154 and another in R. E. Jones catalog #)
came to the forest calling each other
and perhaps playing or fighting. I shot
one and the other did not fly away

and remained flying back and forth apparently in search of his mate. It was also shot.

and remained fle



Flowering tree at Río de Olmo. Sept 10-1970

5 9289